

THE PSYCHOLOGICAL BULLETIN

THE SOCIAL PSYCHOLOGY OF EVERYDAY LIFE

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It has been predicted (223) that "the field of social psychology will cease to exist even by the end of this generation unless its subject matter can consist of more important things than hypotheses concerning natural behavior or of mere verbal definitions." Whether or not this prophecy is to be literally fulfilled, it is nevertheless true that the social psychologist ordinarily finds himself in a dilemma when he is asked by the layman for explanations of everyday social phenomena. He is usually at a loss to provide completely satisfactory reasons for fads, for the persistence of useless customs, for the appeal of marathon dances, or for war enthusiasm. He cannot predict a short-lived wave of enthusiasm for technocracy or forecast the outcome of the N.R.A. There is no way for him to relieve his embarrassment except by turning his attention directly and unequivocally to the study of authentic and significant phenomena of social life.

Where will the social psychologist obtain his facts? Sociologists have already gathered much valuable data concerning everyday social life. The social psychologist must gather new facts to supplement these data and must then interpret the combined findings in terms of dynamic, systematic psychology. At present the sociologist's descriptions of his findings are based on tenuous and approximate psychological principles, while the systematic, deductively derived conclusions of social psychologists seem inadequate because they do not account for the behavior of ordinary social life. Numerous writers (128, 177, 265, 294) have warned that the ordinary affairs of social life cannot, on the whole, be brought into the laboratory without destroying their original character. The social psychologist's

disregard of this caution is perhaps the chief reason for the present state of affairs. Instead of selecting full-bodied problems from everyday life and attempting to create new techniques or to adjust existing ones which would elucidate the problems with the least amount of distortion, investigators have tended to reverse the order and have adapted their problems to fit standardized laboratory methods. The choice lies between thorough studies on authentic problems, conducted with the best techniques that can be devised, and controlled laboratory experiments on problems which have no relation to life itself. Dunlap (91) has contended that "psychology is fully competent to explain all mental processes, social as well as individual, without recourse to mysticism or pseudo-psychology." If this statement is to express a reality rather than a hope, social psychology must have both an adequate foundation in everyday social life and a consistent set of psychological principles which fit firmly upon this foundation.

That this is not an insuperable task is evidenced by many recent investigations which both deal with *real* problems and employ adequate and scientific techniques. From the actual conduct of citizens, F. H. Allport (4, 6) has gathered significant data to represent the characteristics of *institutional* behavior as contrasted to *personal* behavior. Attitudes have been successfully measured and their significance in the lives of students and citizens has been demonstrated (165, 232, 283, 288). The relationship of general attitudes to the thought and conduct of everyday life has been shown (56). Other investigations have employed qualitative methods with success: thus Ch. Bühler (45) makes use of *Verstehen* as well as statistics in her analysis of life histories; Hader and Lindeman (128) devised techniques for the study of the joint committee in industry;¹ while Lazarsfeld and Zeisl (183) and Schanck (249) lived in communities and participated in the regular life of the groups to gather suitable data. These are but a few samples of recent studies which may be commended for their novel and adequate methods, and for their fidelity to problems as they actually exist in communities of socialized human beings.

If the social psychologist prefers to take his problem into the laboratory in the interest of exactness, he must recognize that one series of experiments conducted with students is not a sufficient foundation for laws of rivalry, group thinking, race prejudice, suggestibility, or any other social function. Experiments and observations must be repeated in different social milieus if the experimenter

¹ A review of *Dynamic Social Research* by J. J. Hader and E. C. Lindeman appears elsewhere in this issue of the BULLETIN.

is to be certain that he is dealing with psychological processes and not with cultural or local peculiarities.

SURVEY OF TEXTBOOKS

The percentage of space which textbooks in social psychology have devoted to problems of everyday life was computed with the assistance of Miss J. M. MacDonald. The selection of material dealing with "everyday life" situations was, of course, somewhat arbitrary. The following criterion was used: the references to everyday life situations must be explicit, either as illustrations of a stated principle or as the statement of a problem under investigation. Theoretical discussions of psychological principles and discussions of experimental technique were excluded; and accounts of both the methods and results of experiments which had no reference to situations of everyday life were omitted. The resulting tabulation of the space devoted to problems of everyday life should be regarded only as an approximation and does not, of course, represent a judgment on the *quality* of the treatment accorded these problems by the various authors.

Several conclusions and interpretations may be derived from this survey. (1) Chronologically considered there is no definite trend in the composition of textbooks in social psychology either as to subject matter or method of treatment. (2) There is no unequivocal definition of social psychology. (3) There is no unanimity of opinion regarding the emphasis that should be placed on situations of everyday life. (4) Everyday social phenomena are mentioned primarily as *illustrations* of general principles rather than as the *setting of problems*. (5) There is an almost *inverse* relationship between dynamic, psychological interpretation and the amount of space devoted to problems of everyday life. Ross, Williams, Gault, Bogardus, Dunlap, Murchison, and Young, for example, give at least half of their attention to everyday situations, yet each is non-dynamic and lacks homogeneous explanatory categories. On the other hand, the works of McDougall and Allport are perhaps the most unified in conception and rigid in their employment of basic principles, yet are among those containing least reference to everyday life. In general it may be said that those who stress *adequacy* are the sociologists, while those who emphasize *consistency* are the psychologists. Sociologists provide descriptions of everyday life phenomena but are often satisfied with loose psychological explanations, while psychologists have failed to extend their carefully devised concepts to situ-

Author	Date	Per cent Devoted to Everyday Life	Definition of Social Psychology	Manner of Treatment
Ross, E. A. (247)	1908	82	"Social psychology treats the psychic planes and currents that arise in consequence of higher associations."	The approach is empirical. Constant use of the suggestion-imitation principle. The method is somewhat circular: principles are induced from immediate observation and are deductively illustrated with examples.
McDougall, W. (202)	1908	13	"For social psychology has to show how, given the native propensities and capacities of the individual human mind, all the complex mental life of societies is shaped by them, and in turn reacts upon the course of their development and operation in the individual."	Treatment is distinctly systematic. The material dealing with everyday life is in the form of illustrations through which the author tries to show the operation of instincts in social life.
Ellwood, C. A. (96)	1917	24	"We mean by social psychology, then, for the purpose of this book, the psychology of associational processes, or the psychology of social life."	The approach to everyday life is through general illustrations deduced from non-dynamic principles of social organization.
Bogardus, E. S. (36)	1917	63	"Social psychology is the scientific study of the social nature and reactions of the mind, and of the interactions of individuals within groups, of group conflicts, of group leadership and control, and of the nature of group and societal progress."	The loosely defined principle of suggestion-imitation and the conception of social organizations employed throughout. Little emphasis placed on any aspect of individual motivation. Principles are illustrated by observations from social life.

Williams, J. M. (297)	1922	84	"Social psychology may be defined as the science of the motives of people living in social relations."	The approach is analytical and inductive. The generalizations derived are descriptive and non-dynamic.
Gault, R. H. (118)	1923	52	"Social psychology in its widest sense applies to a study of the interactions among animals. More specifically, and as the term is usually employed, it applies to the reactions of members of the human race one to another."	Observations and statistical data are summarized in general principles.
Allport, F. H. (5)	1924	15	"Social psychology is the science which studies the behavior of the individual in so far as his behavior stimulates other individuals, or is itself a reaction to their behavior; and which describes the consciousness of the individual in so far as it is a consciousness of social objects and social reactions."	The approach is systematic, based on a pre-potent reflex theory of individual motivation. Illustrations referring to everyday life are deductive.
Bogardus, E. S. (37)	1924	65	"Social psychology studies inter-social stimulation and response, social attitudes, values and personalities."	Emphasis is primarily on the influence of social interaction as it modifies original human nature and produces social attitudes and behavior. Phenomena typical of social life are discussed with abundant illustrations. Explanation is in terms of general principles which are, from the strict psychological point of view, greatly oversimplified.
Dunlap, K. (91)	1925	66	"Social psychology is essentially group psychology."	The approach is in part inductive. Generalizations are immediate and do not rest on a systematic psychology of the individual.

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Thouless, R. H. (279)	1925	23	"The object of this book is to give such a presentation of modern psychology as may serve as a background to the social sciences."	The approach is systematic and dynamic. Explanations are in terms of McDougall's instinct hypothesis. Deductive illustrations from everyday life.
Bernard, L. L. (27)	1926	28	"Social psychology deals with the psycho-social processes which arise in individual and collective behavior as the result of human inter-relationships on a neuropsychic plane."	The book deals with dynamic individual psychology, the development of the social personality and group phenomena. Observations and illustrations used deductively.
Sprowls, J. W. (266)	1927	10	"Social psychology is the science of human behavior in the actual or imagined presence of an individual or group of individuals."	Primarily an historical resumé of the theories and concepts of social psychology. The approach is eclectic. Everyday life situations used only for illustration.
Young, K. (304) (Source Book)	1927	40	"In short, the social process, I take it, deals with three variables—social groups, culture patterns, and individual organisms. Social psychology treats largely the first of these, sociology the second, and physiology and psychology the third."	The compilations reveal the author's sociological bias. Emphasis is on environmental factors rather than on a system of individual motivation. Descriptive accounts of social phenomena are given.
Mukerjee, R., and Sen-Gupta, N. N. (221)	1928	18	"The problem with which we are concerned in the following chapters is twofold. First, we shall attempt to discover the mechanism and the process by which the mental life of man is molded into social patterns by the group environment. Secondly, we shall seek to explain certain special forms of group life in the light of the principles of behavior that our analysis reveals."	The approach is eclectic, unsystematic, and deductive, the situations from everyday life being used as illustrations. Although interpretation is often in terms of psychological principles, the book is largely sociological.

Kantor, J. R. (162)	1929	26	"Cultural, or social psychology, therefore, is the study of the individual as he develops cultural behavior equipment."	Treatment is systematic, theoretical, but not dynamic. General observations are classified under topics. Explanations are in terms of social causation.
Ewer, B. C. (98)	1929	45	"Social psychology studies the traits of the mind which underlie social life, describes them in detail, explains them by reference to heredity and environment, ascertains the laws of their operation in groups, and is thus enabled to some extent to predict and control behavior."	The deductive examples used in the latter part of the book are explained in terms of the general principles stated in Part I.
Murchison, C. (223)	1929	50	"It will be the thesis of this book that social psychology deals with those human characteristics that make political life inevitable."	Treatment is historical, non-dynamic and analytic. The method is descriptive. Frequent generalizations and evaluations are made.
Young, K. (303)	1930	52	"Social psychology deals with the study of personality as it develops in relation to the social environment."	The approach is observational and descriptive. Deductive illustrations are given with reference to variegated psychological principles.
Krueger, E. T., and Reckless, W. C. (174)	1931	24	"The text will deal primarily with the study of the development of human nature and personality and will attempt to show the extent to which they are products of social experience and interaction."	The cultural approach is used. Theory of motivation is largely in terms of attitudes and wishes. Everyday life situations used deductively as illustrations. Occasionally situations or case histories described and generalizations made.
Folsom, J. K. (105)	1931	15	"Social psychology, then, is the study of the attitudes of human beings in society and of the social contacts which produce these attitudes and are in turn influenced by them."	An attempt is made to combine the "individual behavior approach, the social interaction approach, and the cultural approach." Everyday life situations used as illustrations of stated principles.

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Murphy, G. and L. B. (224)	1931	13	"Social psychology studies individuals in their interactions, when the analysis of impersonal stimuli and the fact of historical determination are not matters of primary concern."	Evaluations made of experimental techniques. Generalizations are approximate. No systematic interpretation of the experiments reported.
Myerson, A. (225)	1934	22	"The field of social psychology as here depicted will not be rigidly defined. It will concern itself with the individual as a starting point—and, since his nature must be understood, we shall take a long running start and discuss the chemistry as well as the physiology of the individual. The psychological discussion will pass perhaps too easily from the individual to the group and back again, following what I believe to be the natural order of events: a circle of constant interaction, inasmuch as the individual's conduct is determined both by his own nature and by his social environment, and social influences become built up by the interactions of the individuals."	Primarily a medical approach showing the relation of social behavior to organic functions. Everyday life situations discussed as illustrations of stated principles.

ations of everyday social life. To date, then, the choice seems to be inevitable between adequacy and systematic consistency.

PRACTICABLE PROJECTS

In order to clarify our argument a list of projects is offered. A brief evaluative summary of the present status of research follows each project. The *Leitfragen* listed under each project are specific examples of accessible problems that have some bearing on the affairs of everyday life. The questions which suggest data to be gathered of course imply that the data must be psychologically interpreted. The references cited should be considered only as representative approaches to the problem and not as complete bibliographies. In spite of the attempt to be internationally representative, the majority of the references cited in this review are American. Perhaps the most valid inference is that social psychology is primarily an American development (164).

Fads and fashions. The literature on this subject is in general descriptive and non-analytical (37, 226, 247).

Why do fads like jig-saw puzzles, anagrams, short skirts, or women's capes come in cycles (92)?

Why are the dictates of Paris, New York, and Hollywood dress designers so readily accepted by women (63, 147, 148)?

Why do marathon dances, pole-sitting contests, and other endurance feats attract so much popular attention (247)?

Why do some fashions remain localized in one community, college, or section of the country while others diffuse (271, 272)?

Conversations. Most of the study on conversation has been concerned primarily with sex and nationality differences (175, 176, 217).

How does conversation vary at different times of the day?

Why are euphemisms used so frequently in conversation (225)?

What sex, class, or locality differences are there in euphemisms?

What rural-urban differences in conversation are noticeable?

What are the functions of conversation in various types of social situations, such as teas, interviews, or reunions?

Humor and laughter. Philosophical and psychological discussions of laughter have been almost entirely deductive (84, 205).

Why do people laugh at a certain cartoon, comic strip, or joke?

What class differences in the sense of humor can be detected by comparing the cartoons that appear in *The New Yorker* and *Collier's* (141)?

What sex, age, or national differences in humor are discernible from analysis of the jokes, or cartoons that appeal particularly to a given age, sex, or nationality?

Compare the laughter evoked by the same joke or humorous situation when it is told in person to a congregate group and to single individuals, when it is told over the radio to groups and to individuals, and when it is read by individuals in solitude (137).

The rôle of imitation in social life. Careful analyses of actual instances of imitation are needed to supplement the more common deductive studies which use *a priori* theory and illustrations (5, 37, 224, 275).

Why are Greta Garbo and Mae West so widely imitated?

To what extent does the conscious or unconscious imitation of a favorite parent, teacher, or business executive affect personal values and expressive movements?

Are rural or urban populations more imitative?

To what extent do children imitate popular heroes like Lindbergh?

How long do they imitate one hero?

The functions of suggestion in everyday social life. Neither the theoretical discussions of suggestion (37, 202, 218) nor the laboratory findings (146, 224) have been extended to analyses of actual social situations.

To what extent is opinion concerning a literary passage or a musical selection affected by the suggestion that the author or composer is renowned (255, 263)?

What devices of orators and evangelists depend upon the principles of suggestion (65, 184)?

What is the rôle of abstract concepts like "liberty," "justice," "the nation," or "the flag" in political and war propaganda (276)?

To what extent are popular attitudes toward the N.R.A., the gold standard, or free trade based on factual knowledge and to what extent on suggestion (30)?

How was indirect suggestion used in newspapers and magazines to change the attitude of the American people toward Russia before recognition by the United States?

Why do cigarette manufacturers find that it pays to sponsor symphony broadcasts?

What is the relative value of positive and negative suggestion in increasing the quality and quantity of work done by students and industrial workers (149)?

How is suggestion used by propagandists in motion picture films (2, 77, 227)?

Why do people accept a physicist's opinion on religion or an actor's opinion on political issues?

Examine the policies of Hitler's "Ministry for Popular Enlightenment and Propaganda."

Crowds. The standard descriptions and interpretations of crowd behavior (184, 208) need to be supplemented by more balanced and complete studies which would apply the principles of general and abnormal psychology (188, 201).

Why is crowd behavior first demonstrated by those individuals who are nearest the speaker (62, 208)?

What rôles do the gestures of the leader or individual members play in crowd formation?

What devices are used by leaders and orators to obtain crowd behavior (65, 123, 254)?

What is the effect of the behavior of spectators upon actors, evangelists, or football players (117, 153, 213)?

Revival meetings. This phenomenon has not yet received a complete psychological analysis (64, 252).

Why does Mrs. MacPherson's revival meeting have a varied program, including hymns, trumpets, banjos, crooners, solos, and drama?

What are the differences in the techniques of Mrs. MacPherson and Billy Sunday (28, 65)?

What are the psychological functions of rhythm in revivals?

What attitudes, desires, or repressions are released by the words of revival hymns (302)?

What are the ways in which positive suggestion is employed (28)?

To what extent does the success of a revival depend upon the similarity of the preëxisting attitudes of the members of the congregation (153)?

Why are revival meetings found chiefly in the United States?

The rôle of legends in the formation of attitudes and conduct. Treatment of this problem has been almost entirely sociological (304).

To what extent do legends like the *Niebelungenlied* or Parson Weems' *Life of Washington* affect adult attitudes toward nationalism?

How do the tales of Robin Hood, Cinderella, or King Arthur affect children's attitudes toward chivalry, justice, or reality? How have legends of the Old Testament affected the habits and attitudes of the American negro?

Institutional concepts. The recent analysis of institutional behavior by F. H. Allport (3) suggests numerous practicable projects.²

Why do educational institutions raise money from alumni by appealing to "school spirit," "the good of the University," or "the old Alma Mater," rather than specifying that money is needed to increase the teaching staff or build laboratories?

Could war enthusiasm be generated without the use of institutional fictions?

How do avertive shibboleths such as "big business," "corporation," or "industry" encourage legislation which is inimical to the interests of individuals?

The social consequences of suppressing feelings and emotions. The social phenomena due to emotional repressions need to be further analyzed (168, 180, 208, 225).

What feelings and emotions must a "gentleman" suppress (110)?

Which may he express?

Why can political cartoons be more effective than editorials (141)?

What is the psychology of parades?

Hitler has encouraged dueling among German students. Why?

What is the relation between gossip and suppressed curiosity (225)?

Patriotism and war enthusiasm. No complete and consistent psychological study of war or patriotism has appeared, although much of the literature on the subject is suggestive (180, 185, 199, 214, 237, 276).

What devices are used by governments, munition manufacturers, and chemical industries to build up "patriotic" attitudes in children (71, 77, 85, 180, 194, 253)?

What devices do jingoists employ to heighten suggestibility in war time (142, 180, 238)?

Can a person have a pro-war attitude if he thinks of the enemy entirely in individualistic terms (3)?

² A review of *Institutional Behavior* by F. H. Allport appears elsewhere in this issue of the BULLETIN.

What is the psychological function of censorship in time of war (303, 305)?

Do children who play with toy guns, soldiers, and battleships tend to be more militaristic than children who do not have such toys?

Gossip and rumor. This topic has been frequently discussed (37, 161, 274) but few observational studies have been made.

Why do people like to gossip (190)?

With what subjects is gossip usually concerned?

Why is gossip characteristic of small towns?

What is the relationship between rumor and cultural homogeneity?

Has radio reduced the effects of rumor?

Religious cures. Discussion is in general based on theory rather than observation (154, 156).

What psychological reasons could be given to account for the origin and persistence for nearly 300 years of a religious shrine such as that of Saint Anne de Beaupré (86)?

What psychological factors are important in an institutionalized shrine like Lourdes and are absent in sporadic shrines (40, 209, 216)?

What preëxisting attitudes do individuals have who seek cures at religious shrines (154)?

"There's safety in numbers." This proverb, which represents an important social fact, has been given little detailed psychological consideration (201, 208).

How many different types of behavior or expressions of opinion are based on the implications of this phrase?

Why do social movements like the Ku Klux Klan or nudism always seek converts (211)?

Friendships. Although some studies have been made of children's friendships (224), this problem has been relatively neglected on the adult level.

Do close friends tend to have similar personality traits and values?

Do friends laugh at the same things?

What are the psychological bases for friendships at different age levels (111, 224)?

How do the requirements for friendships between members of opposite sexes differ from those of friendships between members of the same sex?

Leadership. The majority of studies of this problem have been concerned either with an analysis of the common characteristics of leaders (69) or with a classification of various types of leaders (224). More thorough investigation is needed on the functional relationship existing between leaders and followers (44, 68, 235).

Why is it necessary to have both a captain and a coach for a football team (124)?

What are the differences in the functions of a leader like Franklin Roosevelt and a dominator like Mussolini (207)?

Why are men with such entirely different personal characteristics as Marx and Stalin regarded as leaders by the same group?

What is the relation between a leader's traits and interests to the values of the following group (56, 304)?

Is it true, as Freud maintains, that followers identify themselves with the leaders (109)?

The relation of custom to good taste and common sense. This problem has frequently been described by sociologists (247, 271) but no psychological explanations have been attempted.

Examine the numerous customs which are opposed to common sense.

What reasons do individuals give for their acceptance of customs (26)?

Under what conditions do customs change when they are opposed to common sense?

How do the standards of "good taste" vary in different groups?

Companionship afforded by inanimate objects. Apparently no study has been made of this phenomenon in spite of its familiarity.

Why is a pipe one of a man's best friends?

Why do people sometimes feel lonesome if a clock stops its slow ticking?

Why do people like to sit in front of a fireplace even though the room is otherwise adequately heated?

Clothing. The majority of psychological studies in this field have been concerned with the origin of clothes (90, 248). Psychoanalytic studies have suggested certain reasons why people take an interest in clothes (104).

What age, sex, or class differences are there in the interest taken in clothes (147)?

What is the relation of an individual's habits of dress to his personal values (56)?

Why is there comparatively little emphasis on style in modern Soviet Russia (122)?

Why does the emphasis on dress vary with different social occasions (76, 148)?

Popularity of racy movies, stories, and newspaper articles. It is frequently claimed that movies and stories of a risqué or highly emotional variety are the causes of much social maladjustment (108). The psychologist prefers to view the popularity of such stories and movies as a reflection of personal maladjustments (131, 158, 212, 304).

Why are tabloid newspapers so popular?

Why do people like to go to movies which frighten them or make them cry (130, 236)?

What are the attitudes, desires, and emotions which different types of short story writers must satisfy? Analysis of the techniques proposed by successful writers for writing adventure stories, love stories, sex stories, horror stories, arm-chair detective stories, action detective stories, airplane or railroad stories discloses the psychological function of various types of "pulp-paper" magazines (20, 112).

Comparison of the traits, interests, and physical appearance of married couples. This problem has been approached by medical men (83, 132) but has received little real psychological attention.

Do married couples tend to have the same personality traits?

Do the personal values of a man and woman become more similar after a few years of marriage?

Is it true, as Kant observed, that married people grow to look alike?

Comparison of the traits and interests of parents with those of their children. Only comparative studies of intelligence seem to have been made (167, 298).

Do children tend to resemble one of their parents in bio-physical traits such as ascendance-submission or extroversion-introversion (282)?

Do the personal values of sons and daughters resemble those of one of their parents?

What is the effect of social participation outside the family on the personality traits or interests of family members?

The nature of attitudes. The quantitative study of attitudes represents perhaps the most highly developed field in modern social psychology. But the emphasis on developing techniques of measure-

ment (87) and on their application (17) have obscured the more fundamental problem regarding the nature of attitudes (7, 88, 89, 100). It would seem wise temporarily to check this enthusiasm for measurement and examine more carefully the qualitative aspects of attitudes (16, 55).

What is the rôle of fact and suggestion in the genesis of attitudes (30, 53, 179, 224, 234)?

Are attitudes always "for" or "against" or can they be neutral (7, 88)?

What is the relation of attitudes to motives and drives (17, 88)?

How are attitudes related to social conduct (56, 100, 303)?

To what extent are attitudes dependent upon intelligence, social position, or economic status (8, 288)?

How are specific attitudes related to more general attitudes (54)?

Does the nature of this relationship vary at different age levels (53, 234)?

What is the difference between an attitude and a trait (7, 11, 14, 287)?

What is the distinction between attitude and sentiment (7, 200)?

The effect of various types of social stimuli on attitudes. The study of Peterson and Thurstone (232) on the influence of movies on children's attitudes illustrates a method for detecting changes in attitudes resulting from controlled stimulus situations.

To what extent do newspapers influence attitudes?

Can directed education change particular attitudes (60, 301)?

How does organized propaganda affect attitudes (29, 85)?

Attitudes of different social classes on heredity. No experimental investigation has been published on this topic.

Do successful business men and day laborers differ in their attitude toward the relative importance of heredity and environment?

Do unemployed tend to think environment is more important than heredity?

The relation of economic values to public opinion. Economists have written on all phases of this subject (215) but it has not been satisfactorily investigated by the psychologist.

How do bankers and industrialists cause an increase in stock prices by molding public opinion through the newspapers (241)?

What are the psychological explanations for financial panics?

Is the classical conception of the "economic man" psychologically valid (22, 286, 293)?

Attitudes toward different races. Since the majority of studies on racial and national differences remain inconclusive (101, 115, 300), it is likely that the characteristics commonly attributed to different races or nationalities are due to stereotype and prejudice. The studies that have appeared on the problem should be extended to non-student populations (38, 127, 166, 281).

Are there sectional or occupational differences in racial attitudes? Do Americans who have traveled in Europe have different attitudes toward European nations from people of the same class who have never been to Europe?

What are the factors that create national or racial stereotypes (39)?

Newspapers. Studies on the newspaper have been largely analyses of newspaper contents (304) or general discussions of the relation of the newspaper to public opinion (198, 303, 304). More detailed, psychological investigations are needed.

Why do people always read the same newspapers?

What types of newspaper opinion are quoted by other newspapers?

To what extent do newspapers misrepresent the context of an article in its headline (24, 259)?

To what extent do the interests of newspaper advertisers determine the news contained in different papers (126, 189)?

Why was Lindbergh's transatlantic flight given more newspaper space than the signing of the armistice (189)?

Why did the death of Rudolf Valentino receive more space than the death of President Eliot in newspapers issued the same day?

Why are "news" stories more effective propaganda than advertising (85, 259)?

Language. Although numerous studies of the psychology of language have been reported (1, 240), the majority of problems of interest to the social psychologist have not been adequately investigated.

What do social concepts such as "honesty," "church," or "government" mean to a four, six, eight, or ten year old child (233)?

Why do orators and propagandists use words which have vague receptual backgrounds (184)?

How and why are nicknames created (225)?

To what extent is social intercourse stereotyped by the limitations of vocabulary (79, 151, 210)?

What is the psychological function of slogans such as "we do our part" (193, 195)?

What is the effect of an individual's personal values and social status upon his understanding of such concepts as "success," "liberty," or "happiness" (56)?

The effects of vocation on personality characteristics. This problem has not received psychological treatment.

What is the basis for the popular stereotype of a doctor, a minister, or a politician?

To what extent do business or professional requirements mold personal values and attitudes (4)?

Do young men with different habits tend to become more alike in their non-vocational behavior after they have participated a few years in similar occupations?

The nature and function of social competition. The problem has been treated either descriptively (66) or by laboratory experiments (224). Almost no investigation has been done on the rôle of social competition in everyday life.

What motives have been introduced in Soviet Russia to decrease the emphasis on individual competition for personal gain (293)?

To what extent does advertising affect the average individual's competition for economic goods?

Is there any psychological justification for the emphasis upon the competitive motive in American educational methods (78, 234)?

To what extent does a woman take an interest in clothes because of competition with other women (147)?

What is the relative strength of the competitive motive in efforts to achieve wealth, prestige, team work, and admiration (293)?

Youth movements. The literature on the subject tends to be moralistic and didactic (42, 258).

What are the psychological reasons for the development of youth movements in post-war Europe?

Why have no extensive youth movements appeared in the United States?

What is the rôle of symbolism in youth movements?

What are the characteristics of leaders of youth movements (34)?

Popular interest in scientific discoveries or formulations. This problem has received no psychological analysis.

Why are people interested in scientific discoveries which are entirely incomprehensible to them?

What types of scientific discovery are most popular (136).

Why do newspapers feature articles on relativity or cosmic rays?

Spiritualistic séances. This topic has been treated chiefly from the point of view of the validity of the spiritualist's claims (41, 103, 222). For the social psychologist the problem is one of credulity.

What type of information is desired by individuals who attend a séance?

What preëxisting attitudes are common to members of a spiritualistic séance?

What devices are used by mediums to enhance suggestibility (145)?

Are believers in spiritualism generally more credulous than other people?

The relation of the homogeneity or heterogeneity of a society to its advancement and to its acceptance of new forms of social or political control. Although this problem is chiefly sociological (203, 261), it has several psychological aspects.

To what extent is Hitler's dictatorship dependent upon a similarity of attitudes among the German people (220)?

Is the commercial use of the radio in the United States tending to create a more homogeneous culture?

What is the psychological meaning of the phrase "the time was ripe" for a specific invention, scientific formulation, or social movement?

To what extent do common legends form a basis for cultural homogeneity?

The psychology of revolution. Sociologists have been interested in revolution as a means of social change but their statements of the psychological principles involved are often oversimplified (93, 186, 262).

What are the similarities and the differences between religious conversion and conversion to a revolutionary doctrine (121, 153, 269, 270)?

What preëxisting attitudes must be common in individuals who participate in a given revolution?

What is the rôle of a revolutionary leader (74, 304)?

Industrial psychology. Although this subject has received elaborate treatment by psychologists, the emphasis has been largely on the relation of the physiological organism of workers to industry, with the implicit assumption that industrial psychology is a business technique which should somehow fit the worker to the industrial scheme (107, 229, 289, 290). Industrial psychology as a problem of human relations has been neglected (10, 128).

What is the attitude of industrial workers toward sabotage, efficiency experts, or a coöperative commonwealth?

To what extent does the worker's attempt to adjust himself to an industrial occupation increase the discrepancy between his institutional and personal attitudes or behavior (3, 4)?

What motives could be introduced in industry to increase both the satisfaction and the efficiency of the worker (293)?

What are the differences between the psychological presuppositions of industrial psychologists in America and in Soviet Russia (264)?

The psychology of radio. In spite of new problems created by the radio, this rich field of investigation has been almost entirely neglected by the social psychologist. Careful research is just beginning. Most of the experimental work has been initiated by advertisers (139) or educators (173) and is only incidentally concerned with problems of psychological interest. In large part, the references cited below are necessarily to research in progress.³

Can personality be judged from voice? This problem has perhaps been investigated more extensively than any other single question created by the radio (12, 138, 231).

What is the reason for the preference of male announcers (58)?

How do the mental processes of an audience listening before the radio differ from those of the same audience when it is in the physical presence of the broadcasters (57, 116, 256)?

Are formal lectures or informal talks better understood over the radio (97)?

What differences are there in attention, humor, interest, or comprehension of radio lectures and ordinary lectures (57, 58)?

What is the comparative effectiveness of visual and auditory presentation (59)?

³ The Bureau of Educational Research of Ohio State University has attempted to gather summaries of all research on radio that is still in progress. These reports may be obtained by writing to the Bureau.

What are the effective conditions for broadcasting spoken material? Generalizations based on observation or rough experimentation have frequently been made (31, 97, 173, 181, 230). Experimental investigation is in progress (58).

What occupational or sectional differences are there in the attitudes and habits of radio listeners (58, 163, 170, 182, 196)?

Has the radio affected attendance at movies, concerts, or church (58, 170)?

Does the radio furnish companionship (58)?

Why do radio listeners prefer music to spoken material (58)?

Can reading or study be accomplished effectively when the radio is on?

How has the radio affected the content of newspapers (25)?

Has the radio had any influence in modifying language (197, 239)?

What psychological methods are used by radio propagandists (85)?

Why do people leave the radio on for long periods of time when they are not paying attention to it?

What are the social effects of radio (228)?

Psychological effects of unemployment. Sociologists and social workers have reported the effects of unemployment on health, living conditions, and family life (33, 51, 95, 102, 134), while statisticians everywhere have been busy with quantitative surveys. There has been comparatively little direct investigation of the psychological effects of unemployment and many of the references cited below refer only incidentally to psychological problems.⁴

How has unemployment affected the attitudes of parents and children toward each other (125, 296)?

How do unemployed use their leisure time (18, 183)?

How has unemployment changed attitudes and plans for the future (172, 183)?

To what extent has unemployment affected the sense of time (183)?

How have the wishes and ambitions of the children of unemployed parents been affected (61, 140, 183)?

Has the unemployment of parents affected the play and fantasy of children (140, 183)?

⁴The Employment Stabilization Research Institute of the University of Minnesota has projected a series of studies which should provide considerable psychological information (134).

What are the differences between the attitudes of employed and unemployed men toward employers, the N.R.A., socialism, war, suicide, birth control, crime, or education (129)?

Does unemployment increase or decrease suggestibility? Are the unemployed more susceptible to advertising, money schemes, fortune tellers, or leaders?

How has unemployment affected the interest in personal appearance or the sense of rivalry and competition?

Do unemployed tend to evolve more imaginative schemes than employed?

Has unemployment changed personal habits such as shaving, washing, sexual behavior, or regularity of hours?

Is the type of fiction or non-fiction read by the unemployed different from that read by employed with the same cultural background (243)?

Do unemployed have more desire than employed to go to the movies, to travel, to own an automobile, a home, or a radio (183)?

BIBLIOGRAPHY

1. ADAMS, S., and POWERS, F. F., The Psychology of Language. *Psychol. Bull.*, 1929, 26, 241-260.
2. ALLEN, D., The Mind in the Unmaking. *World Tomorrow*, 1923, 6, 178-182.
3. ALLPORT, F. H., *Institutional Behavior*. Chapel Hill: Univ. of N. Carolina Press, 1933. Pp. 526.
4. ALLPORT, F. H., Psychology in Relation to Social and Political Problems. *Psychology at Work* (edit. by P. S. Achilles). New York: McGraw-Hill, 1932, 199-252.
5. ALLPORT, F. H., *Social Psychology*. Boston: Houghton Mifflin, 1924. Pp. 453.
6. ALLPORT, F. H., J-Curve Hypothesis of Conforming Behavior. *J. Soc. Psychol.*, 1934, 5, No. 2.
7. ALLPORT, G. W., Attitudes. *Handbook of Social Psychology* (edit. by C. Murchison). Worcester: Clark Univ. Press, 1934.
8. ALLPORT, G. W., The Composition of Political Attitudes. *Am. J. Sociol.*, 1929, 35, 220-238.
9. ALLPORT, G. W., Review of Kimball Young's *Social Psychology*. *Psychol. Bull.*, 1930, 27, 731-733.
10. ALLPORT, G. W., Review of Viteles' *Industrial Psychology*. *J. Abn. & Soc. Psychol.*, 1933, 28, 216-218.
11. ALLPORT, G. W., What Is a Trait of Personality? *J. Abn. & Soc. Psychol.*, 1931, 25, 368-372.
12. ALLPORT, G. W., and CANTRIL, H., Judging Personality from Voice. *J. Soc. Psychol.*, 1934, 5, 37-55.

13. ALLPORT, G. W., and VERNON, P. E., The Field of Personality. *Psychol. Bull.*, 1930, 27, 677-730.
14. ALLPORT, G. W., and VERNON, P. E., *Studies in Expressive Movement*. Boston: Houghton Mifflin, 1933. Pp. 269.
15. ASTOR, J. J., ET AL., *The Third Winter of Unemployment*. London: King, 1923. Pp. 350.
16. BAIN, R., An Attitude on Attitude Research. *Am. J. Sociol.*, 1928, 33, 940-957.
17. BAIN, R., Theory and Measurement of Attitudes and Opinions. *Psychol. Bull.*, 1930, 27, 357-379.
18. BAKKE, E. W., *The Unemployed Man*. London: Nisbet, 1933. Pp. 308.
19. BALDWIN, B. T., Child Psychology. *Psychol. Bull.*, 1928, 25, 629-697.
20. BARDON, M., Love Is in Style. *Writer's Digest*, 1934, 14, 25-28.
21. BARTLETT, F. C., *Remembering: a Study in Experimental and Social Psychology*. Cambridge: Cambridge Univ. Press, 1932. Pp. 317.
22. BEAGLEHOLE, E., *Property: a Study in Social Psychology*. London: Allen & Unwin, 1931. Pp. 327.
23. BECKMAN, R. O., Mental Perils of Unemployment. *Occupations*, 1933, 12, 28-35.
24. BENT, S., *Ballyhoo: the Voice of the Press*. New York: Boni & Liveright, 1927. Pp. 398.
25. BENT, S., The Future Newspaper. *Century*, 1929, 117, 342-348.
26. BERGER, C. Q., Persistence of Obsolete Usages. *Sociol. & Soc. Res.*, 1934, 18, 258-264.
27. BERNARD, L. L., *Introduction to Social Psychology*. New York: Holt, 1926. Pp. 651.
28. BETTS, F. W., *Billy Sunday: the Man and His Methods*. Boston: Murray, 1916. Pp. 69.
29. BIDDLE, W. W., *Propaganda and Education*. New York: Teach. Coll., Columbia Univ., 1932. Pp. 84.
30. BIDDLE, W. W., The Relationship between Knowledge and a Measure of Autistic Thinking on Certain International Problems. *J. Soc. Psychol.*, 1931, 2, 493-496.
31. BINGHAM, W. V., The Making of a Radio Address. *Education on the Air* (edit. by J. H. MacLachy). Columbus: Ohio State Univ. Press, 1932, 84-91.
32. BLACK, J. D. (edit.), *Research in Social Psychology of Rural Life*. New York: Soc. Sci. Res. Counc., 1933. Pp. 130.
33. BLOODWORTH, J. A., *Social Consequences of Prolonged Unemployment: an Analysis of Five Hundred Cases*. Minneapolis: Univ. Minn. Press, 1933. Pp. 16.
34. BLÜHER, H., *Führer und Volk in der Jugendbewegung*. Jena: Diederichs, 1924. Pp. 31.
35. BLÜHER, H., *Wandervogel: Geschichte einer Jugendbewegung* (6th edit.). Prien: Kampmann & Schnabel, 1922. Pp. 272.
36. BOGARDUS, E. S., *Essentials of Social Psychology*. Los Angeles: E. S. Bogardus, 1917. (4th edit. Los Angeles: Miller, 1923. Pp. 320.)

37. BOGARDUS, E. S., *Fundamentals of Social Psychology*. New York: Century, 1924. Pp. 479.
38. BOGARDUS, E. S., *Immigration and Race Attitudes*. New York: Heath, 1928. Pp. 268.
39. BOGARDUS, E. S., Social Distance and Its Origins. *J. Appl. Sociol.*, 1925, 9, 216-226.
40. BOISSARIE (PROSPER GUSTAV), *Lourdes und seine Geschichte vom medizinische Standpunkte aus betrachtet* (2d edit.). Augsburg: Hüttler, 1892. Pp. 355.
41. BORING, E. G., The Paradox of Psychic Research. *Atlantic Mo.*, 1926, 137, 81-87.
42. BRAUN, R., *Individualismus und Gemeinschaft in der deutschen Jugendbewegung*. Erlangen: Döres, 1929. Pp. 147.
43. BRITAN, H. H., The Function of the Emotions. *Psychol. Rev.*, 1926, 33, 30-50.
44. BROICH, K., Führeranforderungen in der Kindergruppe. *Zsch. f. ang. Psychol.*, 1929, 32, 164-212.
45. BÜHLER, CH., *Der menschliche Lebenslauf als psychologisches Problem*. Leipzig: Hirzel, 1933. Pp. 328.
46. BURGESS, E. W., The Cultural Approach to the Study of Personality. *Ment. Hyg.*, 1930, 14, 307-325.
47. BURGESS, E. W., The Family as a Unit of Interacting Personalities. *The Family*, 1926, 7, 3-9.
48. BURROW, T., Social Images vs. Reality. *J. Abn. & Soc. Psychol.*, 1924, 19, 230-235.
49. BUSEMANN, A. (edit.), *Handbuch der Pädagogischen Milieukunde*. Halle: Schroedel, 1932. Pp. 359.
50. CALHOON, S. W., Auditory Impressionability. *Education on the Air* (edit. by J. H. MacLachy). Columbus: Ohio State Univ. Press, 1933, 320-322.
51. CALKINS, C., *Some Folks Won't Work*. New York: Harcourt Brace, 1930. Pp. 202.
52. CAMPBELL, C. M., *Delusion and Belief*. Cambridge: Harvard Univ. Press, 1926. Pp. 78.
53. CANTRIL, H., Attitudes in the Making. *Understanding the Child*, 1934, 4, 13-15.
54. CANTRIL, H., General and Specific Attitudes. *Psychol. Monog.*, 1932, 42, No. 192. Pp. 109.
55. CANTRIL, H., The Range and Nature of Rural Attitudes. *Research in Social Psychology in Rural Life* (edit. by J. D. Black). New York: Soc. Sci. Res. Council, 1933, 127-130.
56. CANTRIL, H., and ALLPORT, G. W., Recent Applications of the Study of Values. *J. Abn. & Soc. Psychol.*, 1933, 28, 259-273.
57. CANTRIL, H., and ALLPORT, G. W., Studies in the Psychology of Radio. *Education on the Air* (edit. by J. H. MacLachy). Columbus: Ohio State Univ. Press, 1933, 317-320.
58. CANTRIL, H., and ALLPORT, G. W., *Studies in the Psychology of Radio*.

- Columbus: Ohio State University, Bur. of Educ. Res., Radio Cooperative Group, 1933-1934.
59. CARVER, M. E., *A Comparison of Visual and Auditory Stimulus Situation*. Columbus: Ohio State Univ., Bur. of Educ. Res., Radio Cooperative Group, 1934.
 60. CHERRINGTON, B. M., and MILLER, L. W., Changes in Attitude as the Result of a Lecture and of Reading Similar Materials. *J. Soc. Psychol.*, 1933, 4, 479-484.
 61. *Children, Young People, and Unemployment*. Geneva: Save the Children Intern. Union, 1933, Pts. I and II. Pp. 112 and 211.
 62. CLARK, H., The Crowd. *Psychol. Monog.*, 1916, 21, No. 92, 26-36.
 63. CLERGET, P., The Economic and Social Rôle of Fashion. *Annual Report of Smithsonian Institute*, 1913, 755-765.
 64. CLEVELAND, C. C., *The Great Revival in the West 1797-1805*. Chicago: Univ. Chicago Press, 1916. Pp. 215.
 65. COMSTOCK, S., Aimee Semple McPherson. *Harper's Mag.*, 1927, 156, 11-19.
 66. COOLEY, C. H., Personal Competition: Its Place in the Social Order and Effect upon Individuals. *Econ. Studies*, 1899, 4, 78-173.
 67. COON, C. M., Studying the Art of Teaching by Radio. *Education on the Air* (edit. by J. H. MacLachy). Columbus: Ohio State Univ., 1933, 109-114.
 68. COWLEY, W. H., Three Distinctions in the Study of Leaders. *J. Abn. & Soc. Psychol.*, 1928, 23, 144-157.
 69. COWLEY, W. H., The Traits of Face-to-Face Leaders. *J. Abn. & Soc. Psychol.*, 1931, 26, 304-313.
 70. CRONBACH, A., The Psychology of Religion. *Psychol. Bull.*, 1933, 30, 327-361.
 71. CROWTHER, S., *America Self-Contained*. New York: Doubleday, Doran, 1933. Pp. 340.
 72. DASHIELL, J. F., Are There Any Native Emotions? *Psychol. Rev.*, 1928, 35, 319-327.
 73. DAVENPORT, F. M., *Primitive Traits in Religious Revivals*. New York: Macmillan, 1905. Pp. 323.
 74. DAVIS, J., A Study of One Hundred and Sixty-Three Outstanding Communist Leaders. *Am. Sociol. Soc. Papers*, 1930, 24, 42-55.
 75. DAVIS, J., Testing the Social Attitudes of Children in the Government Schools of Russia. *Am. J. Sociol.*, 1927, 32, 947-952.
 76. DEARBORN, G. V. N., The Psychology of Clothing. *Psychol. Monog.*, 1918, 26, No. 112. Pp. 72.
 77. DEMETER, K., Die Filmpropaganda der Entente im Weltkriege. *Arch. f. Politik u. Geschichte*, 1925, 4, 214-231.
 78. DEWEY, J., *Democracy and Education*. New York: Macmillan, 1916. Pp. 434.
 79. DEWEY, J., *Experience and Nature*. Chicago: Open Court, 1925. Pp. 443.
 80. DEWEY, J., *Human Nature and Conduct*. New York: Holt, 1922. Pp. 336.
 81. DEWEY, J., The Need for Social Psychology. *Psychol. Rev.*, 1917, 24, 266-277.

82. DEWICK, H. N., *The Recall Value of Visual and Auditory Advertising Material*. New York: Columbia Broadcasting Co., 1933.
83. DICKINSON, R. L., and BEAM, L., *A Thousand Marriages*. Baltimore: Williams & Wilkins, 1931. Pp. 482.
84. DISERENS, C. M., and BONIFIELD, M., Humor and the Ludicrous. *Psychol. Bull.*, 1930, 27, 108-118.
85. DOOB, L., *Psychological Factors in Propaganda*. (Ph.D. thesis.) Harvard College Library, 1934.
86. DRISCOLL, J. T., Miracle. *Catholic Encyclopedia*, 1911, 10, 338-348.
87. DROBA, D. D., Methods for Measuring Attitudes. *Psychol. Bull.*, 1932, 29, 309-323.
88. DROBA, D. D., The Nature of Attitude. *J. Soc. Psychol.*, 1933, 4, 444-463.
89. DROBA, D. D., Topical Summaries of Current Literature: Social Attitudes. *Am. J. Sociol.*, 1934, 39, 513-524.
90. DUNLAP, K., The Development and Function of Clothing. *J. Gener. Psychol.*, 1928, 1, 64-78.
91. DUNLAP, K., *Social Psychology*. Baltimore: Williams & Wilkins, 1925. Pp. 261.
92. EARLE, A. M., *Two Centuries of Costume in America*. New York: Macmillan, 1903. 2 vols. Pp. 824.
93. EDWARDS, L. P., *The Natural History of Revolution*. Chicago: Univ. of Chicago Press, 1927. Pp. 229.
94. ELDER, R. F., *Has Radio Sold Goods?* New York: Columbia Broadcasting Co., 1932.
95. ELDERTON, M. (edit.), *Case Studies of Unemployment*. Philadelphia: Univ. Penna. Press, 1931. Pp. 418.
96. ELLWOOD, C. A., *An Introduction to Social Psychology*. New York: Appleton, 1917. Pp. 343.
97. EWBANK, H. L., Studies in the Techniques of Radio Speech. *Quart. J. Speech*, 1932, 18, 560-571.
98. EWER, B. C., *Social Psychology*. New York: Macmillan, 1929. Pp. 436.
99. FARIS, E., Attitudes and Behavior. *Am. J. Sociol.*, 1928, 34, 271-281.
100. FARIS, E., The Concept of Social Attitudes. *Social Attitudes* (edit. by K. Young). New York: Holt, 1931, 3-16.
101. FARIS, E., The Verbal Battle of the Races. *Soc. Service Rev.*, 1929, 3, 19-29.
102. FISCHER, R., and HEIMANN, F., *Deutsche Kinderfibel*. Berlin: Rowohlt, 1933. Pp. 312.
103. FLOURNOY, T., *Spiritism and Psychology*. (Transl.) New York: Harpers, 1911. Pp. 353.
104. FLÜGEL, J. C., *The Psychology of Clothes*. London: Hogarth, 1930. Pp. 257.
105. FOLSOM, J. K., *Social Psychology*. New York: Harpers, 1931. Pp. 701.
106. FOLSOM, J. K., A Suggested Project for a Survey of Rural Attitudes in the United States. *Research in Social Psychology of Rural Life* (edit. by J. D. Black). New York: Soc. Sci. Res. Council, 1933, 106-114.
107. FORD, A., *A Scientific Approach to Labor Problems*. New York: McGraw-Hill, 1931. Pp. 446.

108. FORMAN, H. J., *Our Movie Made Children*. New York: Macmillan, 1933. Pp. 288.
109. FREUD, S., *Group Psychology and the Analysis of the Ego*. London: Internat. Psychoan. Press, 1922. Pp. 134.
110. FREUD, S., *Psychopathology of Everyday Life*. New York: Macmillan, 1914. Pp. 341.
111. FURFEY, P. H., *The Gang Age: A Study of the Preadolescent Boy and His Recreational Needs*. New York: Macmillan, 1926. Pp. 189.
112. GALLISHAW, J., What the Men's "Pulp-Paper" Magazines Are Buying. *The Writer*, 1933, **45**, 132-135.
113. GALSORTHY, J., *The Mob*. London: Duckworth, 1914. Pp. 81.
114. GARRETT, H. E., and SCHNECK, M. R., *Psychological Tests, Methods, and Results*. New York: Harpers, 1933. Pp. 235.
115. GARTH, T. R., A Review of Race Psychology. *Psychol. Bull.*, 1930, **27**, 329-356.
116. GASKILL, H. V., Research Studies Made at Iowa State College. *Education on the Air* (edit. by J. H. MacLachy). Columbus: Ohio State Univ., 1933, 322-326.
117. GATES, G. S., The Effect of an Audience upon Performance. *J. Abn. & Soc. Psychol.*, 1924, **18**, 334-344.
118. GAULT, R. H., *Social Psychology*. New York: Holt, 1923. Pp. 336.
119. GUISE, F. W. O., Die öffentliche Persönlichkeit. *Beiheft z. Zsch. f. ang. Psychol.*, 1928, **44**. Pp. 249.
120. GILLILAND, A. R., A Study of the Superstitions of College Students. *J. Abn. & Soc. Psychol.*, 1930, **24**, 472-479.
121. GOLDMAN, E., *Living My Life*. New York: Knopf, 1931. 2 vols.
122. GREEN, M., The Russian Revolution in Clothes. *The Nation*, 1934, **138**, 44-45.
123. GRIFFITH, C. R., A Comment upon the Psychology of the Audience. *Psychol. Monog.*, 1921, **30**, No. 136, 36-47.
124. GRIFFITH, C. R., *Psychology and Athletics*. New York: Scribners, 1928. Pp. 281.
125. GROVES, E. R., The Family. *Am. J. Sociol.*, 1933, **38**, 873-879.
126. GRUENING, E. H., *The Public Pays*. New York: Vanguard Press, 1931. Pp. 273.
127. GUILFORD, J. P., Racial Preferences of a Thousand American University Students. *J. Soc. Psychol.*, 1931, **2**, 179-204.
128. HADER, J. L., and LINDEMAN, E. C., *Dynamic Social Research*. New York: Harcourt, Brace, 1933. Pp. 231.
129. HALL, O. M., Attitudes of Unemployed and Employed Engineers. *Person. J.*, 1933, **12**, 222-228.
130. HALMAN, D. F., If You Must Write for Movies. *The Writer*, 1933, **45**, 129-131.
131. HAMILL, R. C., The Rôle of the Risqué Story. *J. Abn. & Soc. Psychol.*, 1921, **16**, 269-273.
132. HAMILTON, G. V., *Research in Marriage*. New York: Boni, 1929. Pp. 570.

133. HANKINS, F. H., Organic Plasticity versus Organic Responsiveness in the Development of the Personality. *Publ. Am. Sociol. Soc.*, 1928, 22, 43-51.
134. HANSEN, A. H., TRABUE, M. R., and DIEHL, H. S., *The Duluth Casual Labor Group*. Minneapolis: Univ. of Minn. Press, 1932. Pp. 54.
135. HARGRAVE, B., *Origins and Meanings of Popular Phrases and Names*. London: Laurie, 1911. Pp. 384.
136. HART, H., Changing Social Attitudes and Interests. *Recent Social Trends* (edit. by W. C. Mitchell, et al.). New York: McGraw-Hill, 1933, 1, 390-396.
137. HAYWORTH, D., The Social Origin and Function of Laughter. *Psychol. Rev.*, 1928, 35, 367-384.
138. HERZOG, H., Stimme und Persönlichkeit. *Zsch. f. Psychol.*, 1933, 130, 300-369.
139. HETTINGER, H. S., *A Decade of Radio Advertising*. Chicago: Univ. of Chicago Press, 1933. Pp. 354.
140. HETZER, H., *Kindheit und Armut*. Leipzig: Hirzel, 1929. Pp. 306.
141. HINES, E., Cartoons as a Means of Social Control. *Sociol. & Soc. Res.*, 1933, 17, 454-464.
142. HOBSON, J. A., *The Psychology of Jingoism*. London: Richards, 1901. Pp. 139.
143. HÖCKNER, H., *Die Musik in der deutschen Jugendbewegung*. Wolfenbüttel: Kallmeyer, 1927. Pp. 214.
144. HOLT, E. B., *The Freudian Wish and Its Place in Ethics*. New York: Holt, 1915. Pp. 212.
145. HOUDINI, H., *A Magician among the Spirits*. New York: Harpers, 1924. Pp. 294.
146. HULL, C. L., *Hypnosis and Suggestibility*. New York: Century, 1933. Pp. 416.
147. HURLOCK, E. B., Motivation in Fashion. *Arch. of Psychol.*, 1929, 17, No. 111. Pp. 71.
148. HURLOCK, E. B., *The Psychology of Dress*. New York: Ronald, 1929. Pp. 244.
149. HURLOCK, E. B., The Psychology of Incentives. *J. Soc. Psychol.*, 1931, 2, 261-290.
150. ISAACS, S., *Social Development in Young Children*. New York: Harcourt, Brace, 1933. Pp. 480.
151. JAMES, W., *Pragmatism*. New York: Longmans, Green, 1907. Pp. 309.
152. JAMES, W., *Principles of Psychology*. New York: Holt, 1890. Ch. X.
153. JAMES, W., *Varieties of Religious Experience*. New York: Longmans, Green, 1902. Pp. 534.
154. JAMES, W., *Will to Believe and Other Essays in Popular Philosophy*. New York: Longmans, Green, 1897. Pp. 332.
155. JAMESON, S. H., and ARMEN, Musical Therapy in Social Control. *Sociol. & Soc. Res.*, 1933, 17, 535-544.
156. JANET, P., *Psychological Healing*. (Transl.) New York: Macmillan, 1925. 2 vols. Pp. 1265.

157. JENNESS, A., The Recognition of Facial Expressions of Emotion. *Psychol. Bull.*, 1932, 29, 324-350.
158. JOHNSON, G. W., *What Is News?* New York: Knopf, 1926. Pp. 98.
159. JONES, H. E. and M. C., Genetic Studies of Emotions. *Psychol. Bull.*, 1930, 27, 40-64.
160. JONES, V., Relation of Economic Depression to Delinquency, Crime, and Drunkenness in Massachusetts. *J. Soc. Psychol.*, 1932, 3, 259-282.
161. JUNG, C. G., *Analytical Psychology*. (Transl.) New York: Moffat Yard, 1916. Pp. 392.
162. KANTOR, J. R., *An Outline of Social Psychology*. Chicago: Follett, 1929. Pp. 420.
163. KAROL, J. J., The Questionnaire and Audience Mail. *Education on the Air* (edit. by J. H. MacLachy). Columbus: Ohio State Univ., 1933, 179-190.
164. KARPF, F. B., *American Social Psychology*. New York: McGraw-Hill, 1932. Pp. 461.
165. KATZ, D., and ALLPORT, F. H., *Students' Attitudes*. Syracuse: Craftsman, 1931. Pp. 408.
166. KATZ, D., and BRALY, K., Racial Stereotypes of One Hundred College Students. *J. Abn. & Soc. Psychol.*, 1933, 28, 280-290.
167. KELLEY, T. L., *The Influence of Nurture upon Native Differences*. New York: Macmillan, 1926. Pp. 49.
168. KEMPF, E. J., *The Autonomic Functions and the Personality*. New York: Ner. & Ment. Disease Pub. Co., 1921. Pp. 156.
169. KINDER, E. F., Scientific Method in Social Psychology. *J. Abn. & Soc. Psychol.*, 1929, 24, 63-73.
170. KIRKPATRICK, C., *Report of a Research into the Attitudes and Habits of Radio Listeners*. St. Paul: Webb, 1933. Pp. 63.
171. KNOWLSON, T. S., *The Origins of Popular Superstitions and Customs*. London: Laurie, 1910. Pp. 242.
172. KOLLAR, R., REZNY, S., and NEČASOVÁ-POUBAVÁ, M., *Der Einfluss der Krise auf Familien beschäftigungslosre Arbeiter in der Cechoslovakischen Republik*. Prag: Forschungsstelle des Sozialinstituts, 1933. Pp. 187.
173. KOON, C. M., *The Art of Teaching by Radio*. Washington: U. S. Printing Office, 1933. Pp. 92.
174. KRUEGER, E. T., and RECKLESS, W. C., *Social Psychology*. New York: Longmans Green, 1931. Pp. 578.
175. LANDIS, C., National Differences in Conversation. *J. Abn. & Soc. Psychol.*, 1927, 21, 354-357.
176. LANDIS, M. H., and BURTT, H. E., A Study of Conversations. *J. Comp. Psychol.*, 1924, 4, 81-89.
177. LANG, R., and HELLPACH, W., Gruppenfabrikation. *Sozialpsychol. Forsch.*, 1922, 1.
178. LAPIERE, R. T., Race Prejudice: France and England. *Soc. Forces*, 1928, 7, 102-111.
179. LASKER, B., *Race Attitudes in Children*. New York: Holt, 1929. Pp. 394.

180. LASSWELL, H. D., *Propaganda Technique in the World War*. London: Paul, Trench, Trubner, 1927. Pp. 243.
181. LAWTON, S. P., Principles of Effective Radio Speaking. *Quart. J. Speech*, 1930, 16, 255-277.
182. LAZARSFELD, P., *Hörerbefragung der Ravag*. Wien: Ravag, 1932. Pp. 38.
183. LAZARSFELD-JAHODA, M., and ZEISL, H., *Die Arbeitslosen von Marienthal*. Leipzig: Hirzel, 1933. Pp. 123.
184. LEBON, G., *The Crowd* (2d edit.). London: Unwin, 1897. Pp. 219.
185. LEBON, G., *The Psychology of the Great War* (Transl.). New York: Macmillan, 1916. Pp. 479.
186. LEBON, G., *The Psychology of Revolution*. New York: Putnam, 1913. Pp. 337.
187. LEDANTEC, F., *L'Egoïsme*. Paris: Flammarion, 1912. Pp. 327.
188. LEE, G. S., *Crowds: A Moving Picture of Democracy*. New York: Doubleday, Page, 1913. Pp. 561.
189. LEE, I., *Publicity: Some of the Things It Is and Is Not*. New York: Industries Pub. Co., 1925. Pp. 64.
190. LEGALLIENNE, R., The Psychology of Gossip. *Munsey's Mag.*, 1912, 48, 123-127.
191. LIPPMANN, W., *The Phantom Public*. New York: Harcourt Brace, 1925. Pp. 205.
192. LIPPMANN, W., *Public Opinion*. New York: Harcourt Brace, 1922. Pp. 427.
193. LUMLEY, F. E., *The Means of Social Control*. New York: Century, 1925. Pp. 415.
194. LUMLEY, F. E., *The Propaganda Menace*. New York: Century, 1933. Pp. 463.
195. LUMLEY, F. E., Slogans as a Means of Social Control. *Publ. Amer. Sociol. Soc.*, 1921, 16, 121-134.
196. LUMLEY, F. H., Habits of the Radio Audience. *J. Appl. Psychol.*, 1933, 17, 29-38.
197. LUMLEY, F. H., Research in Radio Education at Ohio State University. *Education on the Air* (edit. by J. H. MacLachy). Columbus: Ohio State Univ. Press, 1933, 348-371.
198. LUNDBERG, G. A., The Newspaper and Public Opinion. *Soc. Forces*, 1926, 4, 709-715.
199. MCCURDY, J. T., *The Psychology of War*. New York: Dutton, 1918. Pp. 93.
200. McDUGALL, W., *Energies of Men*. London: Methuen, 1932. Pp. 395.
201. McDUGALL, W., *Group Mind* (2d edit.). New York: Putnam, 1920. Pp. 418.
202. McDUGALL, W., *An Introduction to Social Psychology*. London: Methuen, 1908. Pp. 355.
203. MACIVER, R. M., *Society: Its Structure and Changes*. New York: Long & Smith, 1931. Pp. 569.
204. MACKAY, C., *Memoirs of Extraordinary Popular Delusions*. London: Bentley, 1841. 3 vols.
205. MAIER, N. R. F., A Gestalt Theory of Humor. *Brit. J. Psychol.*, 1932, 23, 69-74.

206. MALINOWSKI, B., *Sex and Repression in Savage Society*. New York: Harcourt, Brace, 1927. Pp. 285.
207. MALLON, P., Roosevelt's Ear to the Ground. *New York Times*, Jan. 14, 1934.
208. MARTIN, E. D., *The Behavior of Crowds*. New York: Harpers, 1920. Pp. 311.
209. MARTIN, S., *The Secret of Lourdes*. London: Parsons, 1926. Pp. 256.
210. MEAD, G. H., A Behavioristic Account of the Significant Symbol. *J. Philos.*, 1922, 19, 157-163.
211. MECKLIN, J. M., *The Ku Klux Klan*. New York: Harcourt, Brace, 1924. Pp. 244.
212. MERZ, C., Big News of 1926. *New Republic*, 49, 213-215.
213. METCALF, J. T., Empathy and the Actor's Emotions. *J. Soc. Psychol.*, 1931, 2, 235-238.
214. MICHELS, R., *Der Patriotismus: Prolegomena zu einer soziologischen Analyse*. München: Duncker & Humblot, 1929. Pp. 269.
215. MILLS, F. C., *The Behavior of Prices*. New York: Nat. Bur. Econ. Res., 1927. Pp. 598.
216. Miracle of Lourdes. *Fortune*, 1934, 9, 53-60.
217. MOORE, H. T., Further Data Concerning Sex Differences. *J. Abn. & Soc. Psychol.*, 1922, 17, 210-214.
218. MORGAN, J. J. B., The Nature of Suggestibility. *Psychol. Rev.*, 1924, 31, 463-477.
219. MOWRER, E. R., *Family Disorganization*. Chicago: Univ. of Chicago Press, 1927. Pp. 317.
220. MÜHLMANN, W. E., Die Hitler-Bewegung. *Sociologus*, 1933, 9, 129-140.
221. MUKERJEE, R., and SEN-GUPTA, N. N., *Introduction to Social Psychology*. New York: Heath, 1928. Pp. 304.
222. MURCHISON, C. (edit.), *The Case For and Against Psychical Belief*. Worcester: Clark Univ. Press, 1927. Pp. 365.
223. MURCHISON, C., *Social Psychology: The Psychology of Political Domination*. Worcester: Clark Univ. Press, 1929. Pp. 210.
224. MURPHY, G. and L. B., *Experimental Social Psychology*. New York: Harpers, 1931. Pp. 709.
225. MYERSON, A., *Social Psychology*. New York: Prentice-Hall, 1934. Pp. 640.
226. NYSTROM, P. H., *Economics of Fashion*. New York: Ronald, 1928. Pp. 521.
227. ODEGARD, P., *The American Public Mind*. New York: Columbia Univ. Press, 1930. Pp. 308.
228. OGBURN, W. F., and GILFILLAN, S. C., The Influence of Invention and Discovery. *Recent Social Trends* (edit. by W. C. Mitchell, et al.). New York: McGraw-Hill, 1933, 1, 152-157.
229. PAGE, R. M., Measuring Human Energy Cost in Industry: A General Guide to the Literature. *Genet. Psychol. Monog.*, 1932, 11, 321-537.
230. PEAR, T. H., *The Psychology of Effective Speaking*. London: Paul, Trench, Trubner, 1933. Pp. 232.
231. PEAR, T. H., *Voice and Personality*. London: Chapman & Hall, 1931. Pp. 247.

232. PETERSON, R. C., and THURSTONE, L. L., *Motion Pictures and the Social Attitudes of Children*. New York: Macmillan, 1933. Pp. 75.
233. PIAGET, J., *Language and Thought of the Child*. (2d edit., transl.) New York: Harcourt, Brace, 1932. Pp. 246.
234. PIAGET, J., *The Moral Judgment of the Child*. (Transl.) New York: Harcourt, Brace, 1932. Pp. 418.
235. PIGORS, P., Leadership and Domination among Children. *Sociologus*, 1933, 9, 140-156.
236. PITKIN, W. B., and MARSTON, W. M., *The Art of Sound Pictures*. New York: Appleton, 1930. Pp. 287.
237. PLAUT, P., LUDWIG, W., and SCHICHE, E., Beiträge zur Psychologie des Krieges. *Beihefte z. Zsch. f. ang. Psychol.*, 1920, No. 21. Pp. 178.
238. PONSONBY, A., *Falsehood in Wartime*. New York: Dutton, 1928. Pp. 192.
239. POWELL, F. T. S., Radio and the Language. *Commonweal*, 1929, 9, 652-653.
240. POWERS, F. F., Psychology of Language Learning. *Psychol. Bull.*, 1929, 26, 261-274.
241. RAUSHENBUSH, H. S., *High Power Propaganda*. New York: New Republic, 1928. Pp. 89.
242. READ, C., *Man and His Superstitions* (2d edit.). Cambridge: Cambridge Univ. Press, 1925. Pp. 278.
243. *Reports of the New York Public Library for 1931 and 1932*. New York: N. Y. Pub. Library, 1932, 1933.
244. REUTER, E. B., and RUNNER, J. R., *The Family*. New York: McGraw-Hill, 1931. Pp. 615.
245. ROSENSTOCK, E., Der Begriff des Lebensraumes und die Methode der Soziologie. *Sozialpsychol. Forsch.*, 1922, 2, 1-15.
246. ROSENSTOCK, E., *Die Hochzeit des Kriegs und der Revolution*. Würzburg: Patmos, 1920. Pp. 303.
247. ROSS, E. A., *Social Psychology*. New York: Macmillan, 1908. Pp. 372.
248. SANBORN, H. C., The Function of Clothing and of Bodily Adornment. *Am. J. Psychol.*, 1927, 38, 1-20.
249. SCHANCK, R. L., A Study of a Community and Its Groups and Institutions Conceived of as Behaviors of Individuals. *Psychol. Monog.*, 1932, 43, No. 195. Pp. 133.
250. SCHELER, M., *Wesen und Formen der Sympathie* (2d edit.). Bonn: Cohen, 1923. Pp. 311.
251. SCHOEN, M., *The Effects of Music*. New York: Harcourt, Brace, 1927. Pp. 273.
252. SCHROEDER, T., Revivals, Sex, and Holy Ghost. *J. Abn. & Soc. Psychol.*, 1919, 14, 34-47.
253. SCOTT, J. F., *The Menace of Nationalism in Education*. New York: Macmillan, 1926. Pp. 223.
254. SCOTT, W. D., *The Psychology of Public Speaking*. New York: Noble, 1926. Pp. 233.
255. SHERIF, M., An Experimental Study of Stereotypes. To be published in *J. Abn. & Soc. Psychol.*
256. SHERIF, M., and HOUGHTON, G., *A Comparison of the Mental Processes of an Audience Listening before the Radio and of the Same Audience in*

- the Presence of the Speaker.* Columbus: Ohio State Univ., Bur. of Educ. Res., Radio Cooperative Group, 1934.
257. SHUTTLEWORTH, F. K., The Social Relations of Children. *Psychol. Bull.*, 1927, 24, 708-716.
258. SIEMERING, H., *Die deutschen Jugendverbände.* Berlin: Heymann, 1931. Pp. 472.
259. SINCLAIR, U. B., *The Brass Check.* Pasadena: U. B. Sinclair, 1919. Pp. 445.
260. SOROKIN, P. A., Recent Social Trends: a Criticism. *J. Pol. Econ.*, 1933, 41, 194-210.
261. SOROKIN, P. A., *Social Mobility.* New York: Harpers, 1927. Pp. 559.
262. SOROKIN, P. A., *The Sociology of Revolution.* Philadelphia: Lippincott, 1925. Pp. 428.
263. SOROKIN, P. A., and BOLDYREFF, J. W., An Experimental Study of the Influence of Suggestion on the Discrimination and the Valuation of People. *Am. J. Sociol.*, 1932, 37, 720-737.
264. SPIELREIN, I. N., Zur Theorie der Psychotechnik. *Zsch. f. ang. Psychol.*, 1933, 44, 31-51.
265. SPRANGER, E., *Types of Men.* (Transl. from 5th edit., *Lebensformen.*) Halle: Niemeyer, 1928. Pp. 402.
266. SPROWLS, J. W., Recent Social Psychology. *Psychol. Bull.*, 1930, 27, 380-393.
267. SPROWLS, J. W., *Social Psychology Interpreted.* Baltimore: Williams & Wilkins, 1927. Pp. 268.
268. STANTON, F. N., *Memory for Advertising Copy Presented Visually vs. Orally.* New York: Columbia Broadcasting Co., 1934.
269. STARBUCK, E. D., *The Psychology of Religion.* London: Scott, 1899. Pp. 423.
270. STARBUCK, E. D., A Study of Conversion. *Am. J. Psychol.*, 1897, 8, 268-308.
271. SUMNER, W. G., *The Folkways.* Boston: Ginn, 1906. Pp. 692.
272. SUMNER, W. G., and KELLER, A. G., *The Science of Society.* New Haven: Yale Univ. Press, 1927. 4 vols.
273. SUTHERLAND, E. H., Mental Deficiency and Crime. *Social Attitudes* (edit. by K. Young). New York: Holt, 1931, 357-375.
274. SWIFT, E. J., *Psychology and the Day's Work.* New York: Scribner, 1918. Pp. 388.
275. TARDE, G., *Laws of Imitation.* (Transl. from 2d French edit.) New York: Holt, 1903. Pp. 404.
276. THIMME, H., *Weltkrieg ohne Waffen.* Stuttgart: Cotta, 1932. Pp. 294.
277. THOMAS, W. I., *The Unadjusted Girl.* Boston: Little, Brown, 1923. Pp. 261.
278. THOMAS, W. I., and ZNANIECKI, F., *The Polish Peasant in Europe and America.* Chicago: Univ. of Chicago Press, 1918-1920. 5 vols.
279. THOULESS, R. H., *Social Psychology.* London: Univ. Tutorial Press, 1925. Pp. 384.
280. THRASHER, F. M., *The Gang.* Chicago: Univ. Chicago Press, 1927. Pp. 571.
281. THURSTONE, L. L., An Experimental Study of Nationality Preferences. *J. Gener. Psychol.*, 1928, 1, 405-425.

282. THURSTONE, L. L., The Vectors of Mind. *Psychol. Rev.*, 1934, **41**, 1-32.
283. THURSTONE, L. L., and CHAVE, E. J., *The Measurement of Attitude*. Chicago: Univ. Chicago Press, 1929. Pp. 97.
284. TYSON, L., *Radio and Education*. Chicago: Univ. of Chicago Press, 1933. Pp. 203.
285. URBAN, W. M., The Philosophy of Language. *Psychol. Bull.*, 1929, **26**, 324-334.
286. VEBLEN, T., *The Theory of the Leisure Class*. New York: Macmillan, 1899. Pp. 400.
287. VERNON, P. E., The Biosocial Nature of the Personality Trait. *Psychol. Rev.*, 1933, **40**, 533-548.
288. VETTER, G. B., The Measurement of Social and Political Attitudes and the Related Personality Factors. *J. Abn. & Soc. Psychol.*, 1930, **25**, 149-189.
289. VITELES, M. S., *Industrial Psychology*. New York: Norton, 1932. Pp. 652.
290. VITELES, M. S., Psychology in Industry. *Psychol. Bull.*, 1930, **27**, 567-635.
291. WAGNER, M. E., Superstitions and Their Social and Psychological Correlations among College Students. *J. Educ. Sociol.*, 1928, **2**, 26-36.
292. WALTHER, A., Sozialspsychologie. *Arch. f. Sozialwissenschaft u. Sozialpolitik*, 1929, **62**, 163-171.
293. WARD, H. F., *In Place of Profit*. New York: Scribner, 1933. Pp. 460.
294. WEBER, M., *Gesammelte Aufsätze zur Soziologie und Sozialpolitik*. Tübingen: Mohr, 1924. Pp. 518.
295. WHEELER, D., and JORDAN, H., Change of Individual Opinion to Accord with Group Opinion. *J. Abn. & Soc. Psychol.*, 1929, **24**, 203-206.
296. WILLIAMS, J. M., *Human Aspects of Unemployment and Relief*. Chapel Hill: Univ. of N. Carolina Press, 1933. Pp. 235.
297. WILLIAMS, J. M., *Principles of Social Psychology*. New York: Knopf, 1922. Pp. 459.
298. WILLOUGHBY, R. R., Family Similarities in Mental-Test Abilities. *XXVII Yrbk. Nat. Soc. Stud. Educ.*, 1928, Pt. I, 55-72.
299. WISSLER, C., *Man and Culture*. New York: Crowell, 1923. Pp. 371.
300. WITTY, P. A., and LEHMAN, H. C., Racial Differences: the Dogma of Superiority. *J. Soc. Psychol.*, 1930, **1**, 394-418.
301. YOUNG, D., Some Effects of a Course in American Race Problems on the Race Prejudice of 450 Undergraduates at the University of Pennsylvania. *J. Abn. & Soc. Psychol.*, 1927, **22**, 235-242.
302. YOUNG, K., The Psychology of Hymns. *J. Abn. & Soc. Psychol.*, 1926, **20**, 391-406.
303. YOUNG, K., *Social Psychology*. New York: Crofts, 1930. Pp. 680.
304. YOUNG, K., *Source Book for Social Psychology*. New York: Crofts, 1927. Pp. 844.
305. YOUNG, K., and LAWRENCE, R. D., *Bibliography on Censorship and Propaganda*. Eugene: Univ. of Oregon Press, 1928. Pp. 133.
306. ZIMMERMAN, C. C., Types of Farmers' Attitudes. *Soc. Forces*, 1927, **5**, 591-596.

INTROVERSION-EXTROVERSION

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The subject of introversion-extroversion¹ has probably received more attention during the past five years than in all the years preceding. Many of the investigations have dealt with the construction and improvement of tests and rating scales. Still another field of investigation has dealt with the relation of *IE* to other aspects of personality. Some little attention has been given to the internal nature of this dimension of personality itself and to possible physiological variables with which it may be correlated. We also find systematic studies of environmental factors that may be significant in the development of *IE* characteristics. Practical applications are still limited, but certain uses in vocational guidance are already indicated.

PSYCHOLOGICAL THEORIES AND DESCRIPTIONS

General Descriptions: Goldenweiser (33) speaks of *I* as the intuitive mind and of *E* as the adaptive or 'craft' mind. The former in the extreme tends toward madness and the latter toward idiocy or toward the mechanical robot. Mauerhofer (57) finds that the chief mark of the *I* type is that he always keeps his distance in the presence of reality. Thompson (93) regards the *I* as an 'individualist' who wants to direct himself, and the *E* as an 'externalist' who wants to be directed from without.

Rorschach (78) uses the terms 'introversive' and 'extratensive.' The *I* type, according to Oeser (68), has a more "differentiated intellect, his productivity is dependent upon inner factors, his mental life shows an 'inward' tendency, so that he is less adaptable to reality and emotionally more stable and controlled, and he is on the whole more solitary and impractical." *E* is described as "much more productive, although his intellectual life is more stereotyped. His life tends to outward expression, his emotionality is less stable, he is far more adaptable in every way, shows more extensive than

¹The term introversion and its derivatives will frequently be indicated in this paper by *I*, and extroversion by *E*.

intensive rapport, is motorically excitable, gregarious and practical" (p. 300). Shuey (81) also places great stress on the degree of 'differentiated intellect.'

Luria (56) distinguishes between a 'reactive-stable' and a 'reactive-labile' type. It is not clear that these types can be identified with *I* and *E*, although one can see a close parallel between Luria's physiological theory of his types and McDougall's physiological theory of *IE*, to be discussed later in this paper.

Spearman's theory that *I* is fundamentally bound up with a relatively high degree of perseveration, or inertia, has been experimentally tested and found wanting. In the first place, Jasper (50) found no significant g-factor present in 16 so-called tests of perseveration, and not one of these tests correlated significantly with *IE* as measured by the Conklin test. Pinard (72) gave 144 patients a battery of perseveration tests and a questionnaire on *IE*. He concluded that "The facts . . . definitely explode the theory that introversion is synonymous with extreme perseveration or that there is any significant correlation between perseveration and what was generally supposed to be the mental make-up of the introvert. If anything the very opposite is the case" (p. 123). The last comment is based upon a correlation of $-.23 \pm .04$. This conclusion is verified by Washburn (102).

Specific characteristics of I and E: Pinard (72) finds the *I* type usually or often: is unable to relax easily; finds it difficult to do two things at once; looks puzzled; finds it hard to ride backward on a train; adapts slowly to changes in illumination; dreams about the past rather than the future; has temptations persisting even after decisions have been reached; sticks to unsolved problems; makes an undue attempt to integrate ideas and perception; has persistent ideas; is interested in many things at the same time, but pursues one problem at the moment. Some of these characteristics obviously satisfy Spearman's criteria of perseveration, but in view of the above evidence obtained from Pinard and Washburn, the *E* type must exhibit as many or more perseverative marks of a different variety.

One characteristic usually attributed to the *I* type is a disposal toward moods of depression. Jasper (51) verified this by showing a correlation of $.43 \pm .05$ between his test of 'depression-elation' and *I* (Conklin test). Wells (105) also found a slight tendency toward greater 'buoyancy of spirits' in the *E* type (Freyd list). On the other hand, Moore (64) working with pathological subjects found negative correlations ($-.42 \pm .08$ and $-.44 \pm .09$) between depres-

sion and dementia praecox symptoms, the latter being measured in terms of cognitive defect.

Because the *E* type is said to have a closer rapport with the environment, it might be supposed that this type is more easily distracted from a task. Hovey (47) found that the *I* type is very slightly, but not significantly, better able to resist distractions during mental work.

Other characteristics may be briefly mentioned. South (82), for example, concludes that the *E* type (Laird test) does better as a rule with concrete and personal problems, whereas the *I* type does better with abstract and impersonal problems. Oliver (69), using the Watson Public Opinion Test, found that the *I* type tends toward more liberal ideas on economic questions and tends to favor more strict moral standards. Vetter (99) found 'radicals' and 'liberals' more significantly *I* (Laird test) than were the 'conservatives' and the 'reactionaries' as distinguished by his own questionnaire. Finally, Allport (1), depending upon pooled ratings of 18 subjects, found positive relationships between *I* and reclusiveness ($r=.40$), lack of sociability ($r=.69$), and lack of drive ($r=.35$).

Constellations of traits: A somewhat new approach to the nature of *IE* consists of a statistical study of the inter-relationships existing between the various characteristics that are said to belong to the *I* and *E* patterns. Darrow and Heath (13), in attempting to find a physiological basis for personality differences, applied a large number of criteria connected with the psychogalvanic reaction. They also used the Northwestern questionnaire (31). They concluded that the various tests revealed three main traits or factors in personality; a 'somasthenic,' a neurasthenic, and a paranoid tendency. These three, the authors remarked, are more like quantitative positions on the same linear scale, the ends of which are tentatively described as 'hypo-active' and 'hyper-active.'

The writer recently took part in an investigation which attempted to ascertain what general factors or dimensions of personality are represented in a typical questionnaire on *IE* (38). It was previously postulated (36) that *IE* has three important aspects, an intellectual, an emotional, and a social. A 'typical' test, including 36 representative items, was administered to 930 students. Each item was correlated with every other one. The inter-correlations were examined by the Spearman-Dodd technique. No single general or universal factor was found running through all 36 items. Thurstone's original factor analysis method was applied in order to estimate the

number of independent factors or dimensions that needed to be postulated for the test as a whole. Eighteen such factors seemed to be present. The four most important were: (1) a tendency to shrink from the environment, especially the social environment, a factor that might be called 'social introversion'; (2) an 'emotional sensitiveness,' or readiness to respond emotionally, a factor that might be identified with the 'emotional extroversion' previously postulated; (3) 'impulsiveness'; and (4) 'ego-centrism.' No single important factor satisfied the descriptions usually given to the intellectual aspect of *IE*. It was concluded that personality is a multi-dimensional affair; that in the usual test several related dimensions have been confused and forced together to form a single somewhat fictitious continuum; and that no measurement of *IE*, or any correlation involving *IE*, means much unless the name of the test is given.

The conclusion that any test of *IE* is 'loaded' with several variables was upheld by another study of the writer's (35) in which the same questionnaire of 36 items was treated by Thurstone's method of similar reactions. The test of internal consistency revealed that the scale separations between pairs of items did not lie along a single continuum but rather lay in various directions, involving not one dimension but many.

Will the inter-correlations of behavior tendencies reveal the same general factors as are found from questionnaires? We can find a partial answer to this question in a detailed study by Newcomb (65). Fifty-one problem boys in summer camp were observed as to 30 specific behavior situations that were expected to be diagnostic of *IE*. The boys were also rated on 9 personality traits which were thought to compose *IE*. The results show that there was only a slight tendency for the same boy to react consistently *I* or *E* at different times. "Inconsistency, rather than consistency, in specific behavior seems to be the rule," says Newcomb (p. 40). And at another place (p. 110) he concludes, "There appear, then, to be no cases of consistent responses to specific situations combined into consistent traits, which are in turn associated so as to form consistent *E* or *I* types."

When, however, the observed behavior tendencies were pooled into 9 groups to correspond with the 9 traits upon which the boys were rated, the inter-correlations of the 9 behavior groups ranged from .018 to .777, with a mean of .374. From this Newcomb concludes that "these relationships are found in the minds of the raters

to a larger extent than in the boys' actual behavior" (p. 111). Newcomb is further supported in the latter contention by the fact that the ratings of the 9 traits gave still higher inter-correlations than did the 9 groups of behavior tendencies. These correlations ranged from .268 to .902 with a mean of .613.

I am willing to agree that Newcomb has pointed out an important error in the rating of behavior, but I am unwilling to attribute the greater part of the correlations between ratings to something "in the minds of the raters." If an investigator, or a rater, groups certain specific behavior patterns together because he sees in them some qualitative similarities, those similarities may stand for some real common element which is 'observed' just as samples of behavior are observed, although less directly. And if the investigator then finds significant correlations between the groups or traits whereas the specific behaviors themselves show little or no correlation, it is because in the process of grouping, the irrelevant aspects of the specific behaviors have been largely cancelled out, and the common elements join forces to enhance the degree of correlation. He should not blame those correlations entirely upon his logic in making the groupings.

GENETIC FACTORS IN INTROVERSION-EXTROVERSION

While most writers have regarded *IE* as primarily a matter of heredity, a number have attempted to discover what environmental factors may be significant. Downey (16) describes a family of 10 siblings all but 1 or 2 of whom rated on the *I* side of the scale. She points out factors both in the family stock as well as in the family life of the group which she thinks are significant.

Busemann (10) concluded that having few siblings makes a child more *I* (reflective), but the presence or absence of siblings of the opposite sex seems to have no effect. Campbell (11) found that girls without siblings become somewhat more *I* adults than do 'intermediate' girls, although the difference is not statistically certain. For boys without siblings, he found no difference as compared with other boys. Loosli-Ulsteri (55) found that orphanage children are inclined to be more 'introversive' and indulge more in autistic thinking than other children. Hewlett and Lester (44) found that *I* is associated with: poor medical history; present physical handicaps; and attendance at a large high school. Wile and Noetzel (111) were interested in birth order as a factor. Five hundred children were classified as either 'explosive' or 'withdrawn.' A group of 355

adults, neurotic and psychotic, were classified as 'manic' or 'schizoid.' They concluded, "Ordinal position is not an especially significant factor in fixing a personality type or in establishing definite forms of difficulty in adjustment or in determining dominant attitudes and responses in human relations" (p. 70).

Wang (100) secured, by questioning, facts concerning the personal histories of 358 students. The following early symptoms or conditions he found favoring *I* (Freyd list): having no, or just 1 or 2, playmates; entering social amusements only when urged, almost never participating in games; having only a few intimate friends of the same sex and almost none of the opposite sex; going to shows alone for recreation; father's age at the time of birth over thirty-six; favoring language as a high school subject. Additional signs or factors in girls were: 'no consistent effort' in discipline by the mother; and 'few kinds' of religious participation. Additional factors for boys were: rarely working at home for spending money; and having an irregular allowance. The above factors have been given as favoring *I*, their opposites also tend to go with *E*. It is not easy to tell here whether we are dealing with 'causes' of *IE* or with early symptoms.

Neymann (66), in a study of 300 tubercular patients, found that this group tended strongly toward *I* until they became bed-fast with the advancing of the disease, when they tend in the opposite direction. There is a possibility that the latter condition is in reality a compensating *E*. And it should be remembered in this connection that there is a high incidence of tuberculosis among schizoid patients. Welles (104) studied 225 hard of hearing students in classes for lip-reading, using the Bernreuter test. He concludes: "The hard of hearing . . . give evidence of being significantly more introverted than their hearing friends. . . . Those judged to have overcome their handicap unusually well do not differ significantly from their hearing friends."

TESTS AND RATING SCALES

A number of tests purporting to measure *IE* have been proposed since the pioneer efforts of Laird and his scale C2. The majority of these are of the questionnaire type. In the discussion immediately to follow, each test will merely be listed together with some limited data to indicate something about its reliability and validity. Space does not permit detail, but references to the authors who have supplied the information on each test are given. It must be kept in mind that

there are several ways of measuring the reliability and validity of a test. Bearing this in mind, one can perhaps be a little tolerant of the wide divergencies in reliabilities and validities actually found. But on the other hand, one cannot fail to notice the unsatisfactory state of the attempts at measurement in the field of *IE*.

Tests of the questionnaire type: We begin with the Laird test. The following estimates of reliability have been given: .69 (8); .59 and .75 (40); .69 (45); and .60 (103). Validity coefficients are consistently low: .40 to .53, when compared with self-estimates (8); .19, when compared with the Marston scale (39); .62 and .39, with the Neymann-Kohlstedt test (39, 84); .42, with the Heidbreder test (47); and with the Conklin test they are .27 (47) and .23 (103). Whitman prepared an abbreviated test with the best 10 items selected from Laird's C2. Its reliability is given as .82 and its validity as .58 (110). This would appear on the surface as an improvement over the original longer test. But it must be remembered that the reduction to a single test item might give even better results so far as reliability is concerned. And restricting the test to a few closely related items might easily improve validity, but at the same time decrease the significance and scope of the trait or traits measured.

The reliability of the Marston scale has been given as: .76 (37); .88 (39); .75, .67, and .65 (43); and Schwegler (80), with his own revision and extension of the Marston scale, found the reliability was .937. The validity of this test is as yet poorly determined. Correlated with the Laird C2 it is only .19 (39); and with Neymann-Kohlstedt, .20 (39). This led the writer to suggest elsewhere (39) that the Marston scale is more heavily loaded with the emotional factor in *IE* and cannot be expected to correlate very highly with the other tests.

The reliability of the Heidbreder questionnaire has recently been given as .61 (47). Its validity is indicated by the following coefficients: .37 (self-associate ratings) and .39 with Conklin.

Only one estimate of reliability has recently been given for the Conklin test, and that is .88 (103). Correlations with other scales (see above) show that this test measures something quite different than the rest. It is the writer's opinion that Conklin's test measures the postulated *thinking IE* which is slighted by the usual test.

The Neymann-Kohlstedt test (hereafter indicated as the NK test) was the first one to be validated by means of the two supposedly extreme *E* and *I* groups, manic-depressives and schizophrenics. Its reliability is estimated as follows: .84 (37); .78 and .46 (77).

Validity coefficients seem to show that it has some affinity with Laird C2: .62 (39) and .39 (84). Neymann reports a distinctly bimodal distribution in large populations (600 subjects) (66). Root, on the other hand, found a normal distribution with 1,000 subjects (77). Using the 10 most diagnostic items from this test, Root formulated an abbreviated scale which gave a reliability coefficient of .81 and a correlation with the NK test of .83 (76).

The Northwestern University test is the longest questionnaire on *IE* yet prepared, and like the NK test each item was validated according as it differentiated the two psychotic groups. Two values are given for its reliability, .50 and .87 (31).

The Bernreuter test was so constructed as to give scores, when weighted differently, upon 4 different personality traits, of which *IE* is one. Reliability coefficients given are usually about .86 (67). Validity coefficients (corrected) of .92 and .99 are given (6). But the correlation between *IE* scores and scores for 'neurotic tendency' made on the same test is usually above .94 and hence Bernreuter properly regards the two variables as identical for his test (7). Campbell (11) verifies this close correlation (.96) between scores for *IE* and for neurotic tendency, and he also finds a high correlation (.84) between the latter and 'submission.'

Most of the questionnaires on *IE* could be improved considerably by setting up differential weights for the affirmative and negative responses, as has been done, for example, in the Northwestern test and in the Bernreuter test. Using Thurstone's method of similar reactions, the writer (35) attempted to find scale values for the "Yes" and "No" answers to a typical test of 36 items. The great importance of differential weights became apparent. Quite often an item that is very diagnostic for *E* or *I*, when the answer is affirmative is not at all diagnostic when the answer is negative, or *vice versa*. The answers "Yes" and "No" are rarely if ever equally diagnostic in opposite directions as several of the existing questionnaires assume. However, if, as seems probable, such a questionnaire is an indicator of several significant variables of personality, it might rather be scored by means of several sets of weights. The Bernreuter test now does this, but the variables for which the test is scored have not been empirically determined, and already two of them, and perhaps three, have been found to overlap very significantly.

One general criticism that can well be made against tests of the questionnaire type is that the desires for self-approval and for social approval are strong vitiating motives. Two studies answer this argu-

ment rather directly. Both Bernreuter (7) and Heidbreder (42) were able to conclude that ordinary ratings are only slightly biased by these two motives.

Various tests of the more objective type: McDougall had suggested some years ago that differences in *IE* could be detected by the rate of fluctuation of an ambiguous figure, such as the shifting windmill shadow or the outline cube. The rate of fluctuation of the outline cube is undoubtedly a rather fixed personal characteristic, with large individual differences (37, 39). The reliability of this test was found to be about .96. According to McDougall a slow rate of fluctuation indicates *E*. Washburn was able to find only the slightest agreement of this kind (101). Braly, and later Hunt, using three questionnaire tests, found only one significant correlation, and that was .44 between fluctuation rate and Laird's C2 (37, 39). With psychotic subjects, rather significant differences appeared. The average rate of fluctuation for schizophrenics was from 4 to 6 times that for manic-depressives (48). The average for schizophrenics was almost identical with that for non-pathological subjects, however, so that the deviation from the normal fluctuation rate is found entirely within the manic-depressive group. This fact, among others, throws doubt upon the supposition that these two psychotic groups are clear examples of extreme *I* and *E* types, or else upon rate of fluctuations as an indicator of *IE*.

Word association tests have also been asked to carry the burden of diagnosing *IE*. O'Connor maintains that *Is* are inclined more toward 'individual' responses; they tend to reveal much about themselves whereas *Es* give more objective and impersonal responses (67). Oliver found that the average *I* gives 18.50 per cent individual responses whereas the average *E* gives only 11.3 per cent (69). Schwegler found several other significant differences (80). The average *I* takes a longer average time to reply to the stimulus word; he is less inclined to give 'contrast' responses; and he more frequently fails to respond. No significant differences were found by Schwegler in stereotypy of response nor in failure to reproduce a previous response. The reliability of the association test is indicated by a coefficient of .80 (74) and another of .91 (103). Correlations with other tests, however, indicate low validity; with the Conklin test, -.004 and with Laird C2, .154 (103).

A test which promises to receive much attention in connection with *IE* in the near future is the Rorschach ink-blot test. This series of symmetrical ink-blot tests has not as yet been standardized as a quanti-

tative test, but a subject's responses are said to indicate his type by the proportion of color-versus-form and color-versus-movement reports made to the pictures. *E* takes his environment rather superficially and reports a larger proportion of colors whereas *I* goes behind the colors and sees forms and movements. Both Enke (20) and Scholl (79) have verified this use of the test as applied to Kretschmer's types. No one has as yet correlated this test with the usual criteria of *IE* and much empirical work is yet to be done with it before it can take its place as a quantitative yardstick, however useful it may be as a clinical tool.

Another test that is even more remotely connected with *IE* as yet is the novel pressure bulb test of Luria. A subject in the usual word association test holds in either hand an inflated bulb which he is told to squeeze simultaneously with his verbal responses. Premature pressures applied to the bulbs are taken to indicate impulsiveness. The 'reactive-stable' type as described by Luria (56) shows very few of these false starts. The 'reactive-labile' type shows many. The latter may have much in common with our *E*.

There remain a few miscellaneous tests in which some theoretical or practical value may be seen. Schwegler (80), for example, found that *Es* gave more responses than *Is* in Whipple's ink-blot test. *Es* were superior in motor output, as shown in the simple task of making pencil strokes on paper; *Es* required a significantly shorter time to arrange in rank order a series of pictures which were to be judged for likes and dislikes; and in Travis' conditioned affect test the *Es* were significantly more inclined to report extremely pleasant and unpleasant experiences.

Introverts are said to be 'slow in movement.' Washburn (101, 102) found that *Is* were significantly slower (200σ versus 169σ) in simple reaction time. But curiously enough, there was little correlation between reaction time and the particular item on 'speed of movement' in the Marston test. In another test, in which the subjects were asked to rate colors and nonsense syllables as to pleasantness and unpleasantness, the *Es* were more likely to give extreme judgments than the *Is*, the difference being rather significant.

It is plain to see that so far as the more objective tests of *IE* are concerned, we are still very much in the trial-and-error stage. Imperfect and discordant criteria also hamper progress. Those who are attempting to measure one by one the simpler characteristics said to belong to the *IE* pattern are rendering valuable aid. But again may it be emphasized, we need to make sure of the exact nature

of our *IE* pattern by empirical methods. Only in this way can the necessary valid criteria be set up as standards against which to measure the worth of our tests.

CHARACTERISTICS CORRELATED WITH INTROVERSION-EXTROVERSION

Age: Laird made the generalization that youth is *E* whereas age is *I* (52). With fifth and sixth grade children, Hendrickson and Huskey (43) found correlations of $-.32$ and $-.15$ between age and the Marston scale, intelligence and achievement held constant. Whitman reports an increase in *I* with the age of college students (109), but Stagner, with both Laird's C2 and with the NK test found that students over twenty are slightly more *E* than those under twenty (86). He attributes this change to college training.

Sex: The majority of investigators find males slightly more *E* than females, but many find no sex difference. Among the former are Faithful (22); Hendrickson and Huskey (43); Hoitsma (45); Laird (52); McClumpha (59); and also Stagner (85). Among those finding no differences are Broom (8); Root (77); and Whitman (109).

Intelligence: The investigators divide about equally into two groups on this question, those who find no relationship at all, and those who find a small positive relationship between intelligence and *I*. No doubt much of the discordance and insignificance existing among the results on this point is due to the great variety of tests used, the different types of groups of subjects studied, and to the fact that other related factors are not partialled out or held constant. Only one of the many who have studied this relationship has found *Es* slightly more intelligent than *Is*. This is Schwegler (80) whose subjects were high school students. The Marston test and McCall's test were employed. Schwegler attributes the slight superiority of his *Es* to their more dynamic attack of the mental test, and to their greater tendency to 'take a chance.' Six writers who have found *Is* slightly superior are: Hendrickson and Huskey (43); Hovey (47); Oliver (69); Pechstein (70); Stagner (84, 89); and Beck (5). Seven writers who report no difference are: Finch and Nemzek (24); Gilliland and Voas (32); Hanna (40); Hoitsma (45); Neymann (66); and Powers (74). McGeoch (61) reports only a very slight positive relation between *I* (Conklin) and ability to memorize. Hovey (47) concluded that *Is* tend to do better with linguistic tests and *Es* with numerical tasks. This apparent selectivity in ability of *Is* and *Es* may account in part for the discordant results given above

and for some of the cases of zero correlation where composite tests of intelligence are used.

Social intelligence: The term referred to here applies to the Moss test by the same name. If *I*s are actually more generally intelligent and *E*s are more socially adequate, one can hardly predict which of the two trends, *E* or *I*, will correlate positively with the Moss test. The evidence is strongly in favor of *I*. McClatchey (58) found a correlation of .53 with Laird's C2. Stagner (84) reports small but consistently positive correlations. Wang (100) also reports insignificant but nevertheless positive correlations. Only one writer, Oliver (69), reports no difference. Still one other, South (82), reports that *E*s are 50 per cent quicker and 33 per cent more accurate on facial expression tests. This is what one might expect. The superiority of *I*s on the Moss test as a whole may be attributable to the fact that this test is more a measure of 'general intelligence' than it is of the social qualities that characterize *E*.

Ascendance-submission: All writers agree to a positive relation between ascendance and *E*. Coefficients of correlation given by five writers (1, 9, 69, 84, 100) range from .13 to .51, nearly all of them being significant. Measures of ascendance-submission are usually obtained from the Allport test.

Inferiority attitudes: Faterson (23), using Heidebreder's two questionnaires, found correlations of .19 and .35 between feelings of inferiority and *I*. Oliver (69) verifies this tendency to some extent. Sward (92) finds similar coefficients, ranging from .38 to .59, all significant.

Suggestibility: This is often given as a mark of *E*, especially by McDougall. Experimental tests on this point, however, give conflicting results. Some of these studies deal with 'hypnotizability' which some regard as synonymous with suggestibility. This identification would seem to the writer still to be open to question. Landis (53) and Wang (100) found insignificant correlations. Wells (106) obtained conflicting results. White (108), using the NK test and a scoring scale for hypnotizability, found *E* correlated with hypnotizability to the extent of .70. Davis and Husband (14) find sex differences a considerable factor in the correlation of *E* and hypnotizability. Williams (112), using the swaying test of suggestibility, found that catatonics were inclined to be *negatively* suggestible, paranoid dementia praecox *positively* suggestible, and manics (supposedly extremely *E*) were unresponsive in half the trials and equally positive and negative in the remainder. Before we can answer the

question about the relation of suggestibility to *IE*, we shall have to improve our criteria of suggestibility. The writer suspects that there are different varieties of suggestibility. If so, which ones are associated with *E* or *I*, if any? Hypnotizability is probably something more than extreme suggestibility, and differing criteria have been used to measure it.

Affectivity and idiosyncrasy: These terms arise from the Pressey X-O test, which gives two scores corresponding to them. With no exception worth noting, investigators find a positive relationship between these two scores on the Pressey test and *I*, although the coefficients are always low and sometimes not significant (26, 32, 53, 69, 100, 103).

Neurotic and psychotic tendencies: This problem divides itself into two parts. There is the almost universal suspicion that the *I* is inclined to maladjustment if not to more serious instability. There is the very troublesome situation found by those who construct tests of *IE* and of 'neurotic tendency,' a difficulty in keeping the two types of tests from correlating significantly with one another. Bernreuter (6, 7), as already mentioned, found correlations above .94 between the two scorings of his questionnaire. The Thurstones (94), in constructing their inventory of neurotic tendency, chose 60 items from *IE* tests and found that many more *I* than *E* responses were diagnostic of neurotic tendency. Stagner finds a correlation of .53 between Thurstone's Inventory and Laird's C2, and a coefficient of $-.39$ between the Inventory and the NK test (84). Landis finds, similarly, *etas* of .56 and .54 between the Inventory and the Heidebreder test. Schwegler finds *Is* more neurotic than *Es* on a modified Woodworth questionnaire (80). Other supporting evidence is given by Downey (17) and by Hoitsma (45).

The second problem has to do with the types of neurotic and psychotic disorders which are said to tend toward either *I* or *E*. It is only necessary to remind the reader of the traditional association of schizophrenia and manic-depressive insanity with *I* and *E* respectively. Campbell (12) presents evidence to support this view, with a very small number of subjects, however. Flemming finds (25) that individuals in so-called *I* occupations tend toward schizophrenia and those in *E* occupations tend toward the 'syntonic' disorders. In this connection we may recall the results of the cube fluctuation test (48) in which manic-depressives had a significantly retarded rate of fluctuation as compared with normal subjects, but the schizophrenics had a 'normal' rate. As for neurotic disorders,

Rorschach states (78) that the *E* type is inclined toward hysterical symptoms and the *I* type toward neurasthenic and psychasthenic.

Miscellaneous characteristics: In forming friendships, the old saying about 'birds of a feather' seems to apply to *IE*. Laird (52) remarks that *Is* get along better with *Is*, and *Es* get along better with *Es*. Flemming (28) found the correlations for *IE* between pairs of 'best friends' were .56 for men and .13 for women. In determining delinquency and such forms of social maladjustment, the rôle of *IE* is yet uncertain. Landis (53) concludes, "Introversion, as such, probably plays some rôle in juvenile delinquency, but its effect is a minor one." Ball (2), from a study of 136 young prison inmates, using the NK test, found three times as many *Is* as *Es*.

SOME PRACTICAL APPLICATIONS OF *IE* TESTS

The prediction of scholarship: Groups of subjects from the fifth grade to university levels have been studied in this respect. For the most part the results are negative; there is little or no correlation found between *IE* and success in scholarship (19, 24, 32, 40, 52, 90, 114). Those who have found any correlation at all agree that *I* is the more favorable trait for successful scholarship (27, 43, 45, 69, 89, 114).

Vocational interests: Among students the choice of a major subject bears some relationship to *IE*. Young and Shoemaker found (115), for example, that literature majors show strong *I* trends and science majors tend toward *E*. Using Strong's *Interest Blank*, Oliver (69) found that the *I* type tends to score high for interest in journalism, medicine, and literary work, and that the *E* type often scored high for interest in engineering, law, psychology, and architecture. This is based upon a limited number of cases. Nurses in training were found to have definite *E*-leanings (Laird C2) by Elwood (19) and by South and Clark (83) but were found to be slightly more *I* (Bernreuter) by Rhinehart (75). Teachers in training were found to be more *I* on the average than other students by Pechstein (70).

*The *IE* ratings of occupational groups:* Laird (52) very early pointed out that office clerks are inclined toward *I* and this has been verified by Trabue (95) in a study of clerical workers in various types of industry. Laird also found that foremen and executives are distinctly *E* as a rule, although some of the top executives combine some of the best *E* and *I* characteristics. Inspectors, accountants, and research engineers were in general on the *I* side of the scale.

Pechstein (70) found that teachers in service were more *I* than practice teachers, and the older teachers were more *I* than the younger ones. Trabue found (95) that salesgirls average decidedly on the *E* side (Bernreuter). The same is true of policemen, and the more successful the policeman the more *E* is his score. Trabue wisely points out that *I* or *E* tendencies taken alone are not valid vocational signals and that vocational guidance must be based upon specific *patterns of traits and abilities* rather than upon the results of individual tests.

THE PHYSIOLOGICAL BASIS OF INTROVERSION-EXTROVERSION

McDougall's theory: The discussion to follow centers around this theory which McDougall has recently reiterated and amplified (60). *IE* is regarded as a temperamental trait that depends primarily upon bodily metabolism, which in turn can be traced to a glandular secretion called the unknown "X." *E* is the positive state which is correlated with a greater amount of secretion X whose business it is to depress the higher cortical centers, releasing their influence over the lower nervous functions. In the *I* type, "thought flourishes at the expense of feeling" due to the inhibition of thalamic function. Nature had to do something to put the brakes on the growing dominance of the cerebral cortex, and secretion X by its selective action on phylogenetically later nervous centers, raises resistance at the synapses there rather than in the older and lower centers. The cortical condition, whether relatively inhibited by secretion X, or released by its absence, is very well indicated by means of the fluctuation test already referred to. Inhibition slows down the rate of fluctuation and lack of secretion X facilitates the rate. It has already been indicated above that the fluctuation test has a very doubtful correlation with the various questionnaires on *IE*. Only two very positive results on this question were obtained, namely, a correlation of .44 with the Laird test, and the fact that manic-depressives have a fluctuation rate only one-sixth to one-fourth as rapid as normal or schizophrenic subjects (39, 48).

Some possible chemical bases: McDougall has maintained that any drug which depresses the cortical centers, such as alcohol, will have an effect similar to that of secretion X, and any drug that increases conductivity in the cortex, such as strychnine or caffeine, will have the opposite effect. Braly (37) found that alcohol, on the contrary, increased the rate of fluctuation in 7 out of 10 subjects. Strychnine, however, did increase the rate of fluctuation as expected.

Hollingworth (46) found no relationship whatever in the susceptibility to caffeine and its effect (facilitation) upon mental work, and the score on an *IE* questionnaire.

A possible chemical basis of differences in personality has been investigated by Furukawa (30). The latter classified subjects according to the 4 blood groups. Group A tended toward *I* in 76 to 90 per cent of the cases, and group B tended toward *E* in 57 to 92 per cent of the cases. Group AB was mixed as to *IE* characteristics in 83 to 84 per cent of the cases. He describes the A group as characteristically "melancholic" and the B group as "sanguine." Wenner and Taylor (107) found that acid and alkaline chemical conditions may have some contrasting effects upon nervous activity. Travis and Dorsey (97) add some support to the theory in a study of the effect of alcohol upon latent patellar reflex time. As is well known, this reflex is said to be a good indicator of cortical dominance over lower reflex centers. As the alcoholic stupor advanced, latent time progressively but irregularly decreased and action current time increased.

Further evidence from studies of reflexes: Hunt (39) made a preliminary study of the relation between the rate of fluctuation of the outline cube and the height of the patellar reflex measured in degrees of arc. The correlation with rate of fluctuation was promising, being about $-.37$. No one has as yet correlated fluctuation rate with latent time of the reflex. Such a study is needed.

Travis and his co-workers (95, 15) found that catatonics have a patellar reflex time much shorter than normal, and manics a reflex time slightly longer than normal. They account for this difference by saying that the manic exhibits a marked increase in cortical activity, and the catatonic a marked decrease. These results and the explanatory assumption are flatly contradictory to the McDougall theory. Dysinger (18) concludes that "Schizophrenics did not present any changes in the reflex response latency or in the voluntary and reflex action current frequency or general pattern to distinguish their records from those of normal individuals" (p. 49 f). This conclusion is significant in connection with the finding of Hunt that schizophrenics did not differ from normals in the rate of cube fluctuations (48).

Miscellaneous findings and theories: Not unlike McDougall's theory is that of Luria (56), and his 'reactive-stable' and the 'reactive-labile' types. The latter possess a "functionally damaged nervous system, exhaustion and anemia, (and) increased reflexes."

Two factors seem to him important: (1) an "unconditioned sensibility of the nervous system," and (2) a defect in cortical inhibition "in consequence of which every arising excitation manifests the tendency to pass immediately to the motor sphere" (p. 75). The *IE* discussion is not greatly cleared up by this contribution, however, since Luria's 'reactive-labile' type corresponds with McDougall's *E* type, and since Luria traces most neuropathic conditions to this type rather than to the opposite. More than that, he states elsewhere (p. 295) that hysteria and neurasthenia are both disorders of the 'labile' type.

Darrow and Heath (13), after applying some 21 physiological measurements, centering around the galvanic technique, and also the Northwestern *IE* test, and Thurstone's Inventory, cautiously conclude that "In a general way extroversion appears to correlate with large physiological reactivity in measures where this reactivity is not measurably affected by 'neurotic trend'" (p. 235).

One interesting theory which has received little attention is that of Gordon (34). His suggestion is that the *I* type has highly tuned interoceptors and proprioceptors, whereas the *E* type has highly tuned exteroceptors. Whether this condition is a primary one or a consequence of central predispositions is not clear.

A recent theory proposed by Downey (16) is based upon the degree of dominance of the 'leading' hemisphere; it is related to the degree of laterality in handedness. Downey concluded that there is a greater proportion of disharmony between dominant eye and hand among the *I* type than among the *E* type, and that the *I* type generally is less likely to be decidedly unilateralized. The question of dominant eye, however, is equivocal in this connection because as we know from the anatomy of the visual mechanism, both hemispheres are connected with both eyes. Estabrooks and Huntington (21) found an insignificant correlation of $-.15$ between left-handedness (left-handed being more *E*) and the Laird test. The relation of *IE* to handedness seems worthy of further study in view of these facts and also in view of the relation of uncertain dominance to speech defects, and in turn the relation of speech defects to *IE*. The question of unilateral dominance might be regarded as an extension of McDougall's more general theory based upon dominance.

SUMMARY

Briefly, the trends in the study of introversion-extroversion seem to be as follows: New proposed types that correspond more or less

with *I* and *E* are Goldenweiser's 'intuitive mind' and 'craft mind'; Rorschach's 'introversive' and 'extratensive' types; and Luria's 'reactive-stable' and 'reactive labile.' Spearman's theory that introversion is essentially a matter of perseveration has been tested and found wanting. Factor analysis of typical tests of *IE* tend to show that such tests measure a number of variables more or less independent of one another. Prominent among these variables are what may be called 'social *IE*' and 'emotional *IE*.' A third form of *IE* (intellectual or thinking *IE*) that was previously postulated by the writer has not as yet been clearly isolated.

Certain family influences, such as the presence or absence of parents or siblings, and certain physical handicaps, such as deafness and tuberculosis, are found to be concomitant with introversion. Tests of *IE* of the questionnaire type are generally neither sufficiently reliable nor valid for individual measurements. Considerable industry has been shown in the devising and checking of more objective tests of *IE*, but this work is handicapped by inadequate criteria of *IE*. Other characteristics positively related to introversion are: age, intelligence, inferiority attitudes, social intelligence, being a female, submissiveness, affectivity, idiosyncrasy, depressed mood and neurotic tendency. Tests of *IE* have been found useful in vocational guidance but not in the prediction of scholarship.

McDougall's physiological theory is the only one that has received more than passing attention. Certain neurological studies lend credence to some aspects of the theory, for example the reality of individual differences in cortical dominance and the relation of this factor to certain chemical conditions. But the relation of cortical dominance to *IE* is by no means clear when questionnaire tests are used as criteria. The study of pathological subjects in relation to *IE* gives equivocal results, both as to the degree of cortical dominance in the different psychotic types, and as to which neurotic and psychotic types are *I* or *E*. It seems highly probable, however, that no psychotic group is clearly and solely a case of extreme *I* or *E*, and that *Es* as well as *Is* may become pathological, in spite of the usual correlation found between *I* and neurotic tendency.

Satisfactory progress in the future work upon *IE*, let the writer reiterate, awaits a successful factor analysis of personality and the discovery of its real variables and their significant criteria. Many of the present contradictions now apparent may vanish if we recognize two or more varieties of *IE* and study individuals accordingly.

BIBLIOGRAPHY

1. ALLPORT, G. W., The Neurotic Personality and Traits of Self-Expression. *J. Soc. Psychol.*, 1930, 1, 523-527.
2. BALL, R. J., Introversion-Extroversion in a Group of Convicts. *J. Abn. & Soc. Psychol.*, 1932, 26, 422-428.
3. BECK, S. J., Personality Diagnosis by Means of the Rorschach Test. *Amer. J. Orthopsychiat.*, 1930, 1, 81-88.
4. BECK, S. J., The Rorschach Tests in Problem Children. *Amer. J. Orthopsychiat.*, 1931, 1, 501-511.
5. BECK, S. J., The Rorschach Test and Personality Diagnosis, in *Institute for Child Guidance Studies*. New York: Commonwealth Fund, 1931, 221-261.
6. BERNREUTER, R. G., *The Personality Inventory*. Stanford University: Stanford Press, 1931.
7. BERNREUTER, R. G., Validity of the Personality Inventory. *Person. J.*, 1933, 11, 383-386.
8. BROOM, M. E., A Critical Study of a Test of Extrovert-Introvert Traits. *J. Juv. Res.*, 1929, 13, 104-123.
9. BROOM, M. E., A Study of a Test of Ascendance-Submission. *J. Appl. Psychol.*, 1930, 14, 405-413.
10. BUSEMANN, A., Geschwisterschaft, Schultüchtigkeit und Charakter. *Zsch. f. Kinderforsch.*, 1928, 34, 1-52.
11. CAMPBELL, A. A., A Study of the Personality Adjustments of Only and Intermediate Children. *J. Genet. Psychol.*, 1933, 43, 197-205.
12. CAMPBELL, K. J., The Application of Extroversion-Introversion Tests to the Insane. *J. Abn. & Soc. Psychol.*, 1929, 23, 479-481.
13. DARROW, C. W., and HEATH, L. L., Reactions Tendencies Relating to Personality, in Lashley's *Studies in the Dynamics of Behavior*. Chicago: University of Chicago Press, 1932, 59-261.
14. DAVIS, L. W., and HUSBAND, R. W., A Study of Hypnotic Susceptibility in Relation to Personality Traits. *J. Abn. & Soc. Psychol.*, 1931, 26, 175-182.
15. DORSEY, J. M., and TRAVIS, L. E., Reflex Response Latencies. *Arch. Neur. & Psychiat.*, 1932, 27, 687-690.
16. DOWNEY, J. E., Familial Trends in Personality. *Char. & Personality*, 1932, 1, 35-47.
17. DOWNEY, J. E., How Psychologists React to the Distinction 'Extrovert-Introvert.' *J. Abn. & Soc. Psychol.*, 1926, 20, 407-415.
18. DYSINGER, D. W., An Action Current and Reflex Time Study of Psychiatric and Neurologic Cases. *Psychol. Monog.*, 1932, 43, No. 194, 31-52.
19. ELWOOD, R. H., The Role of Personality Traits in Selecting a Career: The Nurse and the College Girl. *J. Appl. Psychol.*, 1927, 11, 199-201.
20. ENKE, W., Die Konstitutionstypen im Rorschach'schen Experiment. *Zsch. f. d. ges. Neur. u. Psychiat.*, 1927, 108, 645-674.
21. ESTABROOKS, G. H., and HUNTINGTON, E. C., The Relation of Left-Handedness to Psychoneurotic Traits and to Introversion. *J. Appl. Psychol.*, 1929, 13, 192.

22. FAITHFUL, T. J., *Bisexuality: An Essay on Extraversion and Introversion*. London: Bale, 1927. Pp. 96.
23. FATERSON, H. F., A Study of the Minnesota Rating Scale for Measuring Inferiority Attitudes. *J. Soc. Psychol.*, 1930, 1, 463-493.
24. FINCH, F. M., and NEMZEK, C. L., The Relationship of the Bernreuter Personality Inventory to Scholastic Achievement and Intelligence. *Sch. & Soc.*, 1932, 36, 594-596.
25. FLEMING, G. W. T. H., Introverted and Extroverted Tendencies of Schizoid and Syntonic States as Manifested by Vocation. *J. Ment. Sci.*, 1927, 73, 233-239.
26. FLEMING, E. G., Emotion, Intelligence, and Introversion. *J. Gen. Psychol.*, 1932, 7, 201-205.
27. FLEMING, E. G., College Achievement, Intelligence, Personality and Emotion. *J. Appl. Psychol.*, 1932, 16, 668-674.
28. FLEMING, E. G., Best Friends. *J. Soc. Psychol.*, 1932, 3, 385-390.
29. FLEMING, E. G., Testing Some Aspects of Personality. *J. Soc. Psychol.*, 1932, 3, 376-384.
30. FURUKAWA, T., A Study of Temperament and Blood Groups. *J. Soc. Psychol.*, 1930, 1, 494-508.
31. GILLILAND, A. R., and MORGAN, J. J. B., An Objective Measure of Introversion-Extroversion. *J. Abn. & Soc. Psychol.*, 1931, 26, 296-303.
32. GILLILAND, A. R., and VOAS, W. H., Personality Tests and Scholastic Attainment. *Person. J.*, 1930, 9, 305-308.
33. GOLDENWEISER, A., *Robots or Gods*. New York: Knopf, 1931. Pp. 138.
34. GORDON, R. G., *Personality*. London: Kegan, Paul, 1926. Pp. xiv, 302.
35. GUILFORD, J. P., An Examination of a Typical Test of Introversion-Extroversion by Means of the Method of Similar Reactions. *J. Soc. Psychol.*, 1933, 4, 430-443.
36. GUILFORD, J. P., and BRALY, K. W., Extroversion and Introversion. *Psychol. Bull.*, 1930, 27, 96-107.
37. GUILFORD, J. P., and BRALY, K. W., An Experimental Test of McDougall's Theory of Extroversion-Introversion. *J. Abn. & Soc. Psychol.*, 1931, 25, 382-389.
38. GUILFORD, J. P., and GUILFORD, R. B., An Analysis of the Factors in a Typical Test of Introversion-Extroversion. *J. Abn. & Soc. Psychol.*, 1934, 28, 377-399.
39. GUILFORD, J. P., and HUNT, J. M., Some Further Tests of McDougall's Theory of Introversion and Extroversion. *J. Abn. & Soc. Psychol.*, 1931, 26, 324-332.
40. HANNA, J. V., Constant Errors in the Attempted Measurement of Introversion. *J. Gen. Psychol.*, 1932, 7, 205-211.
41. HATTINGBERG, H. VON, Psychologische Typen mit besonderer Berücksichtigung der Typenlehre C. G. Jungs. *Zsch. f. Menschenk.*, 1931, 7, 123-139.
42. HEIDBREDER, E., Self Ratings and Preferences. *J. Abn. & Soc. Psychol.*, 1930, 25, 62-74.
43. HENDRICKSON, G., and HUSKEY, J. E., Extroversion as a Factor Condi-

- tioning Achievement in the Fifth and Sixth Grades of the Elementary School. *J. Educ. Res.*, 1932, **25**, 6-13.
44. HEWLETT, T. C., and LESTER, O. P., Measuring Introversion and Extroversion. *Person. J.*, 1928, **6**, 352-360.
 45. HOTTSMA, The Reliability and Relationships of the Colgate Mental Hygiene Test. *J. Appl. Psychol.*, 1925, **9**, 293-303.
 46. HOLLINGWORTH, H. L., Experiments on Susceptibility to Drugs. *Amer. J. Psychol.*, 1931, **43**, 139-144.
 47. HOVEY, H. B., Measures of Extroversion-Introversion Tendencies and Their Relation to Performance under Distraction. *J. Genet. Psychol.*, 1929, **36**, 319-329.
 48. HUNT, J. M., and GUILFORD, J. P., Fluctuation of an Ambiguous Figure in Dementia Praecox and in Manic Depressive Patients. *J. Abn. & Soc. Psychol.*, 1933, **27**, 443-452.
 49. HUNTER, J., and BRUNNER, A., The Emotional Outlet of Gamblers. *J. Abn. & Soc. Psychol.*, 1928, **23**, 38-39.
 50. JASPER, H. H., Is Perseveration a Functional Unit Participating in all Behavior Processes? *J. Soc. Psychol.*, 1931, **2**, 28-51.
 51. JASPER, H. H., The Measurement of Depression-Elation and its Relation to a Measure of Extroversion-Introversion. *J. Abn. & Soc. Psychol.*, 1930, **25**, 307-318.
 52. LAIRD, D. A., How Personalities are Found in Industry. *J. Indus. Psychol.*, 1926, **1**, 654-662.
 53. LANDIS, C., An Attempt to Measure Emotional Traits in Juvenile Delinquency, in Lashley's *Studies in the Dynamics of Behavior*. Chicago: University of Chicago Press, 1932, 265-316.
 54. LEVY, D. M., and BECK, S. J., The Rorschach Test in Manic-Depressive Psychosis, in *Manic Depressive Psychosis*. Baltimore: Williams & Wilkins, 1931, 167-181.
 55. LOOSLI-ULSTERI, M., Le Test Rorschach applique a differents groups d'enfants de 10-13 ans. *Arch. de Psychol.*, 1929, **22**, 51-106.
 56. LURIA, A. R., *The Nature of Human Conflicts*. Trans. by W. H. Gantt. New York: Liveright, 1932.
 57. MAUERHOFER, H., *Die Introversion, mit spezieller Berücksichtigung des Dichters H. Hesse*. Bern and Leipzig: Haput, 1929. Pp. 61.
 58. MCCLATCHEY, V. R., Theoretical and Statistical Critique of the Concept of Social Intelligence. *J. Abn. & Soc. Psychol.*, 1929, **24**, 217-220.
 59. MCCLUMPHA, T., Sex Differences in Emotional Outlets. *Science*, 1925, **25**, 292.
 60. MCDUGALL, WM., A Chemical Theory of Temperament Applied to Introversion and Extroversion. *J. Abn. & Soc. Psychol.*, 1929, **24**, 293-309.
 61. MCGEOCH, J. A., and WHITLEY, P. L., Correlations between Certain Measurements of Personality Traits and Memorizing. *J. Educ. Psychol.*, 1933, **24**, 16-20.
 62. MACNITT, R. D., *Introversion and Extroversion in the High School*. Boston: Badger, 1930. Pp. 224.
 63. MILLER, E., *Types of Mind and Body*. New York: Norton, 1927. Pp. 95.

64. MOORE, T. V., The Empirical Determination of Certain Syndromes Underlying Dementia Praecox and Manic Depressive Psychoses. *Amer. J. Psychiat.*, 1930, 9, 719-739.
65. NEWCOMB, T. M., The Consistency of Certain Extrovert-Introvert Behavior Patterns in Fifty-one Problem Boys. *Teach. Coll. Contrib. Educ.*, 1929, No. 382. Pp. 123.
66. NEYMANN, C. A., The Relations of Extroversion-Introversion to Intelligence and Tuberculosis. *Amer. J. Psychiat.*, 1930, 9, 687-696.
67. O'CONNOR, J., *Born That Way*. Baltimore: Williams & Wilkins, 1928. Pp. 319.
68. OESER, O. A., *Some Experiments on the Abstraction of Form and Colour*. *Brit. J. Psychol.*, 1932, 22, 287-323.
69. OLIVER, R. A. C., The Traits of Extroverts and Introverts. *J. Soc. Psychol.*, 1930, 1, 345-366.
70. PECHSTEIN, L. A., Introversion as a Factor in Vocational Selection of Teachers. *Psychol. Bull.*, 1928, 25, 196-197.
71. PERKINS, N. L., Personality Studies in a Nursery School Group: A Critique of the Marston Questionnaire. *Amer. J. Orthopsychiat.*, 1931, 1, 193-221.
72. PINARD, J. W., Tests of Perseveration. II. Their Relation to Certain Psychopathic Conditions and to Introversion. *Brit. J. Psychol.*, 1932, 23, 114-126.
73. POWERS, N. E., An Application of the Marston Introversion-Extroversion Rating Scale. *J. Educ. Psychol.*, 1928, 19, 168-174.
74. POWERS, F. F., The Influence of Intelligence and Personality Traits upon False Beliefs. *J. Soc. Psychol.*, 1931, 2, 490-493.
75. RHINEHART, J. B., An Attempt to Predict the Success of Student Nurses by the Use of a Battery of Tests. *J. Appl. Psychol.*, 1933, 17, 277-293.
76. ROOT, A. R., A Short Test of Introversion-Extroversion. *Person. J.*, 1931, 10, 250-253.
77. ROOT, A. R., and ROOR, E. B., A Study of the Neymann-Kohlstedt Diagnostic Test for Introversion-Extroversion. *J. Abn. & Soc. Psychol.*, 1932, 26, 415-521.
78. RORSCHACH, H., The Application of the Interpretation of Forms to Psychoanalysis. *J. Nerv. & Ment. Dis.*, 1924, 60, 225-248.
79. SCHOLL, R., Zur Theorie der teilinhaltlichen Beachtung von Form und Farbe. *Zsch. f. Psychol.*, 1927, 101, 281-320.
80. SCHWEGLER, R. A., A Study of Introvert-Extravert Responses to Certain Test Situations. *Teach. Coll. Contrib. to Educ.*, 1929, No. 361. Pp. 183.
81. SHUEY, H., A New Interpretation of the Rorschach Test. *Psychol. Rev.*, 1933, 40, 213-215.
82. SOUTH, E. B., Some Psychological Aspects of Committee Work. *J. Appl. Psychol.*, 1927, 11, 437-464.
83. SOUTH, E. B., and CLARK, G. Y., Some Uses of Psychological Tests in Schools of Nursing. *Amer. J. Nursing*, 1929, 29, 1495-1501.
84. STAGNER, R., The Intercorrelation of Some Standardized Personality Tests. *J. Appl. Psychol.*, 1932, 16, 453-463.

85. STAGNER, R., Factors in the Testing of Personality: I. Sex Differences. *J. Soc. Psychol.*, 1932, 3, 477-482.
86. STAGNER, R., Differential Factors in the Testing of Personality: II. Differences in Maturity. *J. Soc. Psychol.*, 1932, 3, 482-487.
87. STAGNER, R., Scoring Weighted Item Tests; a Short-cut Method. *Person. J.*, 1932, 11, 174-176.
88. STAGNER, R., Improved Norms for Four Personality Tests. *Amer. J. Psychol.*, 1932, 45, 303-307.
89. STAGNER, R., The Relation of Personality to Academic Aptitude and Achievement. *J. Educ. Res.*, 1933, 3-15.
90. STEEN, F. H., and ESTABROOKS, G. H., The Relation Between Introversion and Scholastic Interests. *Voc. Guid. Mag.*, 1928, 7, 38-39.
91. STEEN, F. H., and HUNTINGTON, E. C., Intelligence, Introversion, and Psychoneurotic Traits in Relation to Choice of Sports. *Amer. Phys. Educ. Rev.*, 1929, 34, 216-249.
92. SWARD, K., Temperament and Religious Experience. *J. Soc. Psychol.*, 1931, 2, 374-395.
93. THOMPSON, D., *A Mind That Was Different*. Oklahoma City: Harlow Pub. Co., 1931. Pp. 117.
94. THURSTONE, L. L., and THURSTONE, T. G., A Neurotic Inventory. *J. Soc. Psychol.*, 1930, 1, 3-29.
95. TRABUE, M. R., Occupational Ability Patterns. *Person. J.*, 1933, 11, 344-351.
96. TRAVIS, L. E., Rate of Reflex Conduction in a Cataleptic Patient. *Proc. Soc. Exper. Biol. & Med.*, 1928, 25, 598-599.
97. TRAVIS, L. E., and DORSEY, J. M., The Effect of Alcohol on the Patellar Reflex Time. *Arch. Neur. & Psychiat.*, 1929, 21, 613-624.
98. TRAVIS, L. E., and DORSEY, J. M., Patellar Tendon Reflex Time in Psychiatric and Neurologic Cases. *Arch. Neur. & Psychiat.*, 1929, 22, 99-104.
99. VETTER, G. R., The Measurement of Social and Political Attitudes and the Related Personality Factors. *J. Abn. & Soc. Psychol.*, 1930, 25, 149-189.
100. WANG, K. A., The Significance of Early Personal History for Certain Personality Traits. *Amer. J. Psychol.*, 1932, 44, 768-774.
101. WASHBURN, M. F., KEELER, K., NEW, K. B., and PARSHALL, F. M., Experiments on the Relation of Reaction Time, Cube Fluctuation, and Mirror Drawing to Temperamental Differences. *Amer. J. Psychol.*, 1929, 41, 112-117.
102. WASHBURN, M. F., HUGHES, E., STEWART, C., and SLIGH, G., Reaction Time, Flicker and Affective Sensitiveness as Tests of Extraversion and Introversion. *Amer. J. Psychol.*, 1930, 42, 412-413.
103. WEBER, C. O., and MAIJGREN, R., The Experimental Differentia of Introversion and Extroversion. *J. Genet. Psychol.*, 1929, 36, 571-580.
104. WELLES, H. H., The Measurement of Certain Aspects of Personality Among Hard of Hearing Adults. *Teach. Coll. Contrib. Educ.*, 1932, No. 545. Pp. 77.

105. WELLS, F. L., A Note on the Numerical Scores of Introvert and Extrovert Self-rating. *J. Abn. & Soc. Psychol.*, 1926, **21**, 316-318.
106. WELLS, W. R., Hypnotizability versus Suggestibility. *J. Abn. & Soc. Psychol.*, 1931, **25**, 436-449.
107. WENNER, W., and TAYLOR, A. B., The Effect of Changes in Acid-Base Equilibrium on Reflex Time. *Amer. J. Physiol.*, 1930, **91**, 365-369.
108. WHITE, M. M., The Physical and Mental Traits of Individuals Susceptible to Hypnosis. *J. Abn. & Soc. Psychol.*, 1930, **25**, 293-298.
109. WHITMAN, R. H., Sex and Age Differences in Introversion-Extroversion. *J. Abn. & Soc. Psychol.*, 1929, **24**, 207-211.
110. WHITMAN, R. H., A Short Scale for Measuring Introversion and Extroversion. *J. Appl. Psychol.*, 1929, **13**, 499-504.
111. WILE, I. S., and NOETZEL, E., A Study of Birth Order and Behavior. *J. Soc. Psychol.*, 1931, **2**, 52-71.
112. WILLIAMS, G. W., A Study of the Responses of Three Psychotic Groups to a Test of Suggestibility. *J. Gen. Psychol.*, 1932, **7**, 302-309.
113. WILLOUGHBY, R. R., Some Properties of the Thurstone Personality Schedule and a Suggested Revision. *J. Soc. Psychol.*, 1932, **3**, 401-423.
114. YOUNG, J. B., How Emotional Traits Predispose to College Failure. *J. Educ. Psychol.*, 1927, **18**, 631-636.
115. YOUNG, J. B., and SHOEMAKER, E., Selection of College Majors as a Personality Expression. *Sch. & Soc.*, 1928, **27**, 119-120.

BOOK REVIEWS

ALLPORT, F. H. *Institutional Behavior*. Chapel Hill: University of North Carolina Press, 1933. Pp. xii+526.

We are introduced to the problem of institutional behavior through the dilemma of a young faculty member whose dean admits that a recently proposed policy will help neither the students, the faculty, the alumni, nor the trustees, but is still certain that the policy will help the "institution." It becomes clear that an institution like a geometrical or chemical fiction can never be defined in substantial terms but only by a statement of what we do with or think about our surrounding environment. Thus institutions take on reality for us only "when we are looking for the fulfillment of some purpose upon a collective, or multi-individual scale" (p. 21). With this conception in mind we are able to locate individuals who are behaving institutionally, but once we have found them we must let go of our fiction and study only the "institutionalized" individual. And since no one institution involves the *total* behavior and thought of any individual we find that "institutions are collections not of individuals, but of a portion of the activities of individuals" (p. ix). Thus an individual who behaves institutionally reacts towards a given "institution" not with his whole personality but with only a particular segment of personality and "institution," if it is to have any meaning at all, can only mean the *common* segments of many individuals involved in a given type of behavior.

The consequences of this compartmentalized behavior in the individual become increasingly serious with the growing emphasis on conformity to institutional standards in modern civilization. This segmentalizing creates personal maladjustment, and the individual seeks an outlet for the characteristics of his personality that have not been involved in the partial behavior of his institutional life. Such outlets he most frequently finds in other types of institutional behavior, each new institution providing for a separate segment of behavior. "Adjustment" then has come to mean the final inclusion of the total individual in many forms of institutional behavior. And if some segment of individuals' lives is not already provided for by an institution of some description, then the usual remedy devised is to create a new institution to care for these roving segments. It is

Professor Allport's contention that the causes of unrest are not to be accounted for by lack of suitable institutions but are to be ascribed to the very fact of institutionalization itself. In our attempt to accommodate the common segments of *all* individuals we have not fully represented any *single* personality. And if the institution in the last analysis depends upon a part of the individual and at the same time obscures the whole personality, it is not surprising that we so seldom find means of complete self-expression, or that an individual in one of his memberships carries out types of behavior or harbors attitudes which are inconsistent with the remainder of his personality.

The consequences of this paradox as they are reflected in our political, economic, familial, educational, and religious life are then separately analyzed by the author.

In applying his analysis to the field of *politics*, Professor Allport seems able to account for many of the problems accompanying popular government. The lethargy of the American people in all political matter is due to the fact that the institution called the "Government" involves only a very partial segment of individuals' lives. Although the fiction that the "People" are governing is kept alive by those few individuals who exploit it for selfish reasons, the "Government" is impersonal to the great majority. Political and legal fictions furthermore obscure the true reasons why "Justice takes its course." In a keen analysis of the Sacco-Vanzetti case, Professor Allport shows that Sacco and Vanzetti were denied a retrial not merely because of any "miscarriage of justice" or even because of prejudice. The principle reason was that the whole investigation was in the hands of a few individuals who were supported by the institutional attitudes of the people. And since the people refused to believe that the "law" was subject to human weaknesses, the particular attitudes of the judge, the jurors, the investigators, etc., were transmogrified into "Justice." This detachment of the "institutions from human beings not only conceals their true nature, but permits us to endow them with qualities of superhuman wisdom and virtue" (p. 129).

In the chapter "Nations Themselves as Sources of War," we find that "the purpose for which individuals are organized into a nation lies mainly in the advantage which such an organization gives them in their contest against a common rival. Nations, in one form or another, are struggle groups" (p. 158). Thus the pacifists' attempts to "unite" nations are in their very conception doomed to failure. "Increasing good will between individuals is a reality;

increasing good will between nations is fiction, a contradiction in terms. To enhance the friendship of individuals throughout the world would not be to increase friendships between nations, but to work definitely toward the abolition of nations. War will be eliminated not by enlarging the good will between nations, but by eliminating nationalism" (p. 165 f). It is only the constant appeal of the jingoists and private interests to such concepts as the "flag," the "national honor," "national rights," etc., that preserves the fiction of the "nation" and causes men to think and act for the good of the "nation" in ways which to them as whole, rational, individuals would be reprehensible. The only solution for this situation is the inculcation of a subjective patriotism based on "the expression of common feelings and ideals which . . . still remain personal" (p. 178) as opposed to the objective patriotism organized from without by individuals with selfish interests.

In the *economic* sphere we have likewise become accustomed to corporate ways of thought and behavior. We tend to forget that the "elements of this (economic) system are psychological in character and really lie *within* human beings" (p. 199) and to project these elements as "economic forces" which lie outside ourselves and beyond our control. Thereby we accept a hopeless cultural determinism, try to cure one economic organization with another instead of questioning the very fact of institutionalized business itself. If we accept as our aim the efficient operation of an impersonal economic organization we can expect nothing but more of its inevitable accompaniments of competition, overproduction, unemployment and the like. The evils can be overcome only "by retarding and simplifying the industrial system to meet once more the needs of men" rather than "trying to force men up to the pace of the machines" (p. 212). Only by refusing to acknowledge that the "corporation" is the person who can act without regard to any of the individuals concerned can we rescue the whole individual from the ruthless exploitation to which he is now subjected.

The carry-over of our institutional habits and ways of thinking into the planning of our use of leisure time is also seen to be fraught with dangers. The technological program of providing increased mechanical devices for recreational purposes will bring more segmentation of personality, more uniformity of behavior, and consequently less possibility for self-expression through creation. As opposed to this program, Professor Allport advocates the "biological method" wherein behavior would be simplified, whole individuals

would meet in face-to-face relationships, and the uniqueness of personality encouraged by opportunity for self-expression through less mechanized forms of creation and appreciation. This is not a suggestion that we halt progress and go back to a "golden age." It is merely the proposal that instead of scheming for the building of a perfectly mechanized society we stop and ask ourselves to what extent *individual* needs and aspirations will be satisfied by such a plan.

The disintegration of *family* life is also due to the increased segmentalization of individuals through institutional behavior. With each member of a family participating in a different set of institutions there is no possibility for the whole personalities of the members to react to one another. If the modern parent really wants to understand his child he must inquire about various segments of the child's life from those who administer various institutions. If the child fails to learn any single standard of conduct it is because he so seldom has a single individual point out to him any common relationships in various specific situations. The studies of Hartshorne and May are shown to have proved only that institutionalized children *have* not formed personality traits and not that such traits *cannot* be formed. Such proposed cures as homes for the aged, companionate marriage, youth organizations, or clubs for adults advocated by social reformers to alleviate the evils accompanying the disappearance of family life are misguided. No amount of institutionalization can create an integrated personality.

The chief objection to Professor Allport's analysis will, of course, come from those sociologists who argue that no amount of psychological dissection of superorganic concepts can ever destroy their conceptual usefulness or lessen the reality of their force in molding the patterns of thought and behavior of the individuals necessarily affected by them. Professor Allport in effect replies that because of the failure to comprehend the nature of these cultural forces the sociologist accepts them as a kind of superstition and thereby subverts the possibility of understanding social trends or of controlling cultural habits.

The experimental social psychologist will regret that Professor Allport did not include in his book more accounts of the experiments which he and his students have carried out on institutional behavior. The pedant will protest at the lack of historical references and will ask how the point of view presented differs essentially from that of Rousseau, Ruskin, Tolstoi, or Kropotkin to mention only a few indi-

vidualists. The average reader will no doubt find the book bulky and in places repetitious. But no one with an interest in the social psychology of everyday life will fail to find the analysis stimulating and significant.

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VON WIESE, L., and BECKER, H. *Systematic Sociology*. New York: John Wiley & Sons, 1932. Pp. xxi+772.

The title-page of this work describes it as: "On the Basis of the *Beziehungslehre* and *Gebildelehre* of Leopold von Wiese, Professor of Political Economy and Sociology at the University of Cologne, adapted and amplified by Howard Becker, Associate Professor of Economics and Sociology at Smith College." The prefaces of the two authors explain their relations, and the double intention of making Professor von Wiese's *Allgemeine Sociologie* more accessible to American students, and at the same time to correlate more closely American and German sociology. To that end, Professor Becker has freely substituted or added American equivalents of German writers referred to in the original work, modified terminology to evoke American as well as German connotations, and added material both from other writings of Professor von Wiese, and from his own. Unlike many books of a more or less composite nature, however, this one is methodologically and artistically a complete unit.

The basis of sociology, as here set forth, is the study, without reference to value-judgments, of the inter-relations of human beings, and the action-patterns resulting, whether between two persons, or plurality patterns of larger groups. To this end a large number of such relations are listed and classified, first under the head of common-human relations, and second under the head of circumscribed relations, and third, under the head of abstract collectivities. Social processes are those of association and dissociation, and a mixed group containing both.

To let the authors speak for themselves (p. 39): "Scientific sociology regards human beings as pieces on the giant chessboard of life; with each succeeding move (social occurrence) they draw closer together, separate, or converge in certain respects, and diverge in others. Here they appear clustered in crowds or groups, there in less coherent union, and there in isolation. Such approach and avoidance constitute the basis of the sociological frame of reference." If sociology is to avoid value-judgments it must employ a

frame of reference that deals with the social personality, the single socius, or monad, with just as much scientific warrant as with population aggregates.

Solitariness is as relevant a social, interhuman state as associativeness; a study of the forms taken by the self in relation to the world leads us from this to the study of the smallest group, the dyad, the smallest of plurality patterns. "When it is recalled that plurality patterns are after all nothing more than neuropsychic patterns, and when the relative nature of sociologically relevant isolation is held in view, it becomes apparent that plurality patterns may be analyzed when only *one* person is studied. The pair presents a distinct sociological problem: how the behavior of two persons in close interaction differs from the behavior of each when in isolation. To this end an analysis of the dyad group shows a division between sympathetic and antithetic pairs, between typical or genuine pairs, based upon sexual or familial relationships, and friendships, and atypical or derivative pairs, based upon conditions of the social or economic order. This is perhaps the most brilliantly original section of the book, pointing the way, as it does, to a great number of fruitful studies in such groups that might be made, and which would add enormously to our knowledge of a wide variety of social processes and action patterns. In the nature of the thing, it is the one human combination that can be studied with any completeness. Probably its very nearness and immediacy of aspect has caused it to be so commonly overlooked. Dominance and submission, leadership and conformity, have been frequently analyzed and explained, but the fact remains that in the vast majority of instances, the relationship is one between person and person, and mind and mind. Religion, for instance, is by etymology the binding of the soul to Deity, *sola cum Solo*, a personal relationship that governs deeply the social action of the individual.

From this primary, direct relationship, the social structure is built, by combinations ever increasing in numbers involved, and complexity of pattern, from temporary sociations to kinship and geographic groups, legal relations, and abstract collectivities. The fifty chapters into which *Systematic Sociology* is divided describe these types of action patterns. Such psychological, or socio-psychological basis as is needed is in general the familiar four wishes of Thomas. The first group of common-human processes or contacts is divided into Association, Dissociation, and Mixed, and the secondary or circumscribed relations under four heads, of Differentiation, Integration, Destruction, Construction, with seventeen

subheads, covering the different group syntheses and antitheses, such as genesis of disparities, domination and submission, ordination, subordination and supraordination, exploitation, and liberation.

One of the many merits of the book is its factual, present and immediate bases for the theories presented. There is no dependence upon situations in ancient Rome, or in some distant island of the south seas, where, from the enormous distances of time and social conditioning, no citizen of our western world can possibly hope to understand all the situational ramifications. The world presented is the familiar one of every day. Hence the book is endlessly stimulating. The false antithesis between society and man is shown for what it is, a very imperfect solution of the problem of social structure, and one often of doubtful provenance. The closely woven argument of the text leaves no annoying loose ends.

The book is packed with brief but brilliant studies bringing together the best of the analyses of earlier writers, and adding to them, or correcting their deficiencies. Such are the studies of the dyad, just mentioned, and the acute study of the phenomena of ordination, supraordination, and subordination, and standardization. The infinite gradations and intergroupings of everyday life, and their sociological importance have seemed to be beneath the notice of many writers, and yet it is by just such common-human relations that in fact the social order is built. One might instance the variant customs of letter-writing, a curiously accurate social index, in spite of all efforts of the public schools at standardization, and one that determines social grouping to a remarkable degree. The one fault to be found with these acute observations is that the limits of space do not permit enough of them.

The method thus presented should lead other students to observe and record such data as everyday life offers. In spite of the volume of sociological writing in existence, much of it is still based upon speculation, and pointed towards a normative end. This book should inspire an accurate, scientific method. It is an important addition to American scholarship.

The final merit of a book is a good index.

Regis College.

CAROLINE E. MACGILL.

LEUBA, JAMES H. *God or Man?* New York: Henry Holt and Co., 1933. Pp. xii+338.

Professor Leuba is a well recognized pioneer in the application of psychological methods to the historical study of religion. This

latest volume is properly speaking neither an historical nor a psychological investigation, though history and psychology both contribute to its conclusions. The book is divided into four parts. Part I describes briefly the conflict of science and religion. Part II is a historical and psychological account of the notions of God and immortality similar to those found in the author's *Belief in God and Immortality*, *Psychology of Religious Mysticism*, etc. Part III compares the practice of religion with those of medicine and psychiatry, much to the advantage of the latter. Part IV attempts to show that Christianity in all its forms from Catholicism to Protestant Modernism is an outworn and obstructive element in modern civilization, especially in intellectual life and maintains that the values incorporated in religion could be better enjoyed if divorced from theological entanglements. As an alternative to the churches Leuba proposes the development of ethical culture societies in which an enlightened morality, an appreciation of beauty and a systematized mental hygiene (*e.g.*, through a modified confessional and a scientific study of the effect of music on the emotions) could be cultivated without theology.

As usual Leuba's picture is fresh and clear and his arguments are set off by interesting, if not always apposite illustrations (*e.g.*, the Versailles treaty as an example of what advance in politics is possible when theology does not intrude). His rationalist criticism of religion follows lines familiar from his other writings. Two specific criticisms may be suggested. The first is that the psychological problem has been oversimplified. Leuba tells us much about illusions and suggestions and psychotherapy but we are left in the dark as to why the human mind so persistently and on so large a scale produces religious illusions, is suggestible to religious influences and is so readily healed by notions and fantasies with a religious content. These facts may not support the claims of the churches but they combine to form the complicated psychological problem of dogmatism. Some consideration of the results of psychoanalysis in this field, which are consistently ignored throughout the book, would have been instructive.

The second criticism is a corollary of the first. Just because religion has deeper roots in human nature than Leuba allows, his substitutes for religion are inadequate. The religious attitude toward the world is projective and interpretative. It represents a compromise, often a very unequal one, between the facts of the environment and the demands of the *psyche*. This may be deplorable but for the

mass of mankind is inevitable. There is a limit to human plasticity; the dynamics of human life and character remain the same in all ages. It is a questionable Utopia in which the colorful pageantry of religion with all its superstition and cruelty is replaced by a life of sweet reasonableness with occasional gatherings of earnest people struggling ineffectively to purg  their thought of all illogicality, and relieving the monotony of their task by regarding a purely secular work of art, listening to a rigorously worthy cadence, or indulging temperately in a harmless Morris dance.

R. P. CASEY.

University of Cincinnati.

GOLDENWEISER, ALEXANDER. *History, Psychology, and Culture*. New York: Knopf, 1933. Pp. xii+475.

This volume of collected essays, most of which are rewritten from previous publications, is dedicated to the memory of Wilhelm Wundt. Such a dedication will be a surprise to many psychologists who are accustomed to think of Wundt's influence as dead and his theories as dated. Goldenweiser, however, is still an enthusiastic admirer, if not an actual disciple, of this "master of social theory."

He shares Wundt's disbelief in the uniformity of cultural advance, and agrees with his emphasis upon the multiplicity of motives and purposes which characterize the development of the cultural forms. He applauds Wundt's use of a psychology in which the integrative and creative functions of the mind are given due weight, and like Wundt distrusts all types of historical determinism, evolutionism, and diffusionism. The only serious criticism which he makes of Wundt's work is that lapses occur in the master's application of these admirable principles to his voluminous collections of anthropological data.

Besides the appreciative essay on Wundt, the volume contains lengthy discussions of totemism and anthropological methods, as well as critical accounts of the theories of Teggart, Bastian, L vy-Bruhl, Durkheim, and Freud. Favorably disposed as he is toward Freud's contributions to the psychology of culture, the author none-the-less answers in the negative his own question, "Is Freud a psychologist?" "While Freudian mechanisms may be common property of us all, they are in control only in the neurotic. To put it differently: the mind behaves the more true to Freudian pattern, the more truly neurotic an individual is. . . . Freud has strayed after the fashion of many psychiatrists and of physicians generally, who are naturally tempted to envisage the individual from the angle of pathology with

which they are especially familiar." Freud, in brief, has never concerned himself with most of the problems which belong to the tradition of psychology.

Speaking of racial differences, the author points out that civilization probably does not depend upon congenital ability. It was for the white man a fortunate moment of history which gave him the most complex cultural development; "to assume that such a forward push could occur in no other culture but the white would be siding with prejudice rather than with probability." In this account Goldenweiser clearly aligns himself with the environmentalists.

In spite of the fact that these essays are chiefly republications, they do not seem, as the author fears, like a "reheated meal." The majority have been hitherto quite inaccessible to social psychologists. Even readers who are familiar with them will probably agree that most of the studies, like good fish chowder, can stand the test of reheating very well.

GORDON W. ALLPORT.

Harvard University.

THOMAS, D. S., LOOMIS, A. M., and ARRINGTON, R. E. *Observational Studies of Social Behavior*. New Haven: Yale Univ. Press, 1933. Pp. xvii+271.

This report describes an attempt to make precise measurements of social interaction. Basically the study deals with the following two questions: (1) Can social phenomena be broken up into meaningful units which are quantitatively interchangeable, *i.e.*, which lend themselves to statistical analysis? (2) Can these units of behavior be recorded reliably?

In the course of studies made on nursery school, kindergarten, trade school and adult industrial groups a technique was evolved. The basic activities of an individual were checked against a time scale laid off in five second intervals. While one observer checked the durations of material, physical, and no-overt activity, another recorded the occurrence or non-occurrence in five second intervals of talking, physical contact and crying. The identity of the person with whom contact (verbal and physical) was made, as well as the rôle of the observed child (in making the contact) were also recorded. Thus two observers working simultaneously could produce reasonably reliable data on the varieties of activities, the relative time spent, and the proportion of social expression (as defined by the authors), in each of the major activity-categories. The application of a similar

technique to adult situations necessitated the differentiation of social interaction according to whether it occurred in connection with "Job" activity or not.

In order to check further the reliability of observers, moving pictures were employed. The agreement of one observer with another, the self-consistency of one observer repeatedly observing the same film, and the agreement of observers with "reality" (the film run at one-fourth normal speed) were determined.

Whether the units used in this study seem meaningful for the differentiation of individuals or the nature of social interaction, and whether they seem quantitatively interchangeable will depend upon the point of view of the reader. Is five seconds of no-overt activity a meaningful unit? Is it interchangeable with any other five second interval regardless of whether the individual concerned is planning his next move with building blocks or phantasying revenge? Is a slap interchangeable with a caress? They are both units of physical contact as used in this study. If they are interchangeable, are they meaningful? Are units which take no account of individual motivation or specific situation useful at all? The affirmative answer is assumed in this study although neither the authors nor the results of the study advance any evidence in support of such an assumption. The eventual answer will depend upon the application of the developed technique. Jersild (*The Constancy of Certain Behavior Patterns in Young Children*, *Am. Journ. Psychol.*, 1933, 45, 125-129), using this same technique, the same observers, on the same children, one year later, found a low degree of conformity to the relative position of the same children in their scores of previous years.

Despite the apparent sacrifice of significance for objectivity in this study, the observation units are by no means all objectively defined. In the moving picture study for observer reliability one unit of observation was the "purposeful change of form or position of an object." It is interesting to note that in general cross-observer reliability tends to decrease as objectivity decreases.

In one of the studies it is said of a child who was found to be least often engaged with material that she "showed less interest in material than any other child in the group." This seems an excellent example of what should not be done with the statistical results obtained. Such interpretation contradicts the objectivity which is aimed at in these measurements.

This study has performed a service in analyzing social behavior into units. A study of variations of one of these units relative to

whatever factors in the situation may be controlled might indeed yield something of value. The methods employed for the systematization of observation, the emphasis placed upon the observer considered as a tool to be checked for accuracy, and the use of the moving picture as a check seem ingenious and fruitful.

IRVING KNICKERBOCKER.

Harvard University.

HADER, J. J., and LINDEMAN, E. C. *Dynamic Social Research*. New York: Harcourt, Brace, 1933. Pp. ix+231.

This book is a self-conscious attempt to outline a research technique applicable to the study of functioning groups. Specifically the joint committee in industry has been chosen for investigation. The original intention of the authors was to gather facts concerning industrial management. For this purpose they sought an acceptable and tested method of procedure. But the only methodological tools they could find involved the isolation and control of the situation to be studied. And since "this is precisely what is impossible in the psycho-social sphere" it was necessary for them to deviate from their original purpose and devise some way to include in their study the continuous psycho-social processes which furnish the reality of actual social situations.

This implies that one must have a thorough knowledge of what one is observing before any quantitative records can be taken. To this end the authors devote four chapters of the volume to the development of a social philosophy which will satisfy the demands of their problem. Four "categories of analysis" are derived. The first, *impulsion*, denotes "all of those aspects of a group which combine to constitute its initial and ongoing dynamic" (p. 45). This includes, for their purposes, the needs and desires of management and workers. The second category, *circumjacence*, is "a term selected to describe those elements in the total situation which condition, limit, or channel the social group under observation, but only those elements which are reducible to psychological or sociological description" (p. 59). This includes such limiting factors as the conference procedure, the attitude of management and employee, etc. *Interaction* is the third category used. By this is meant "that aspect of total social process which includes social stimuli, organizations of response to social stimuli, and overt responses together with the various relations revealed between the three terms" (p. 72). Included under this category are the various characteristics of the individual—as-a-par-

ticipant, such as his relation to the problem, his knowledge of the problem, and his experience. The final category, *emergence*, describes "any evolutionary change in the quality of the consequence of joint committee action" (p. 90). This emergence in a social situation may range from acquiescence (commanding and obeying) to integration (exploring and inventing).

In the chapter "Values and Subjectivity in Social Research" the authors insist that the observer of social relations must live into the situation he is studying, and by means of enlightened self-awareness be able to interpret his impressions. "The social scientist who utilizes the spectator method becomes a sort of 'detective' who spies upon furtive events but keeps himself aloof, free from contamination. It is our contention that in so far as his 'detective' methods succeed he will, in the same proportion, separate himself from that reality which is significant" (p. 98).

To satisfy these demands of the methodology, a pluralistic approach is recommended. The authors propose that at least the following six techniques be used in investigating a single social situation: interviewing, participant observing, direct observing, case study analysis, charting, and statistical analysis. A chapter is devoted to a discussion of each technique. The conclusion is reached "that meaningful social action based upon knowledge will follow when social research is founded upon an inclusive epistemology and an experimental logic, that is, when its facts fall into a relativistic scale which bears some resemblance to life itself" (p. 226).

The warning sounded in this book and the thorough qualitative treatment of the method outlined should be of primary value to the sociologist. The procedure of the authors closely resembles the Sociography being developed by Dr. Paul Lazarsfeld in Vienna. For the social psychologist the chief interest of the book perhaps lies in its implication that the industrial psychology of the future must be included as a branch of social psychology. The real problems in the psychology of industry are not those which arise when the worker is considered purely as a physiological organism to be adjusted to, and exploited by, organized industry. If the improvement of the life of the *individual* rather than the more efficient operation of an economic institution is to be taken as the goal of the social order, then the most vital problems of modern industry are those concerned with human relations.

HADLEY CANTRIL.

Harvard University.

DAVIS, R. C. *Ability in Social and Racial Classes*. The University of Virginia Institute for Research in the Social Sciences; Institute, Monograph No. 14. New York: The Century Co., 1932. Pp. ix+114.

Although much has been done in comparing social and racial classes with reference to physical characteristics and behavior, little research has been extended into the field of physiological or functional differences. Yet, nevertheless, as the author of this volume points out, these functions are probably significant and germane to any comprehensive study of ability differences. If differences in behavior depend upon the condition of the nervous system, then measures of the functional excellence of the nervous system should shed some light on the problem of intelligence.

For his own investigation the author selected three tests: speed of nervous conduction as measured in the Achilles tendon reflex, the rate of tapping, and the electrical resistance of the skin. The apparatus necessary for the second and third of these is complex, and does not fall within the scope of this review. The subjects of the experiment were selected as groups from the upper and lower extremes of ability of both favored and non-favored social classes. There were thus seven groups: 75 white college students; 46 white feeble-minded; 45 negro college students; 39 negro feeble-minded; 50 city white children; 35 mountain white children, and 47 negro children.

The results of the testing demonstrate significant differences between groups. Highest were the white college and city children; lowest were the mountain children and the white and the negro feeble-minded. "However, the maximum differences between group averages were 10 per cent, and the distribution overlapped considerably in all cases." The author concludes that "certain biological variations are advantageous for the possession of 'good intelligence'."

As a scholarly piece of significant research work the volume under review is to be recommended. Even as a study in method alone it is appreciably superior to most investigations into racial and social differences; on the technical side it is comparable to some of the best work yet published; and as a simple, direct attack upon a relatively unexplored region in the realm of group differences it ranks as a pioneer.

In the opinion of the reviewer it is not so much the findings from this investigation—and those are noteworthy enough—that are important, but rather the method of approach; the definition of the problem,

and the appreciation of its peculiar significance; the simple, direct attack, even though the construction and calibration of technical equipment must have been exceedingly laborious; and the modesty of the simple conclusions.

O. L. HARVEY.

Norfolk, Mass.

PIDDINGTON, RALPH. *The Psychology of Laughter*. London: Figurehead, 1933. Pp. 227.

This is one of those scholarly books, two-fifths of which is devoted to summarizing the theories of other writers, one-fifth to criticism of these theories, and the remainder to presentation of the author's point of view. Piddington has carried out the scheme admirably and according to the best literary tradition. In spite of several tedious passages, the book is well worth reading.

After reviewing various theories of laughter, the author concludes that no previous theory satisfactorily explains both the laughter of joy (euphoria) and laughter at the ludicrous. Following the genetic approach, he suggests that joyous laughter (1) is a reaction deeply rooted in the human constitution, growing out of the smile, (2) is aroused by pleasant situations not requiring active adjustment, (3) expresses to others the mental states accompanying such situations.

The ludicrous, he says, always involves a situation in which two or more social attitudes or evaluations are in conflict, necessitating a readjustment. Originally such a situation calls for weeping. Now weeping is an admission that such an adjustment is necessary, whereas one would prefer to maintain the *status quo*. One therefore usually *compensates* by adopting the opposite pattern of behavior, viz., laughter.

" . . . By laughing we adopt an attitude from which our infancy has expressed an attitude of complete satisfaction with things as they are; by adopting this attitude we inhibit any tendency to change in our system of social evaluations " (page 129).

Laughter thus conserves institutions by forcing conformity of behavior. The reviewer feels that if such a formula must be employed, *regression* would be more appropriate than *compensation*. Furthermore, this type of compensation could hardly be so universal as the author supposes it to be.

Piddington has not reviewed the numerous German and American

objective studies of laughter, evidently on the ground that these lack theoretical value.

University of Nebraska.

ARTHUR JENNESS.

ROBACK, A. A. *Self-consciousness and Its Treatment*. Cambridge: Sci-Art, 1933. Pp. 122.

Self-consciousness is a form of fear which has a variety of manifestations, ranging from the perturbations caused by minor social *faux pas* to stage fright and delusions of reference. It is a feeling with which nearly everyone is familiar. Three hundred seventy individuals among one thousand who were questioned reported it to be their greatest personal handicap in practical life. There are virtually no discussions of this common problem either in the literature of mental hygiene or in the theoretical literature of emotion. The author advocates an experimental attack upon the forms and conditions of this neglected state of consciousness.

He believes that self-consciousness is an emotional pattern resting upon deep-lying instinctive and constitutional bases. Prominent among these are weak instincts of self-assertion and strong instincts of self-abasement. In addition to such predisposing causes there is in each individual instance a superficial or precipitating cause to be found in the situation of the moment.

Since self-consciousness usually accompanies feelings of inferiority the principal therapy consists in offsetting failure through achievement. A great deal likewise can be done to relieve the embarrassment which results from betraying self-consciousness if the individual will acquire free and natural control of his voluntary muscles, diminishing his tendency to keep aloof through adopting a spontaneous and outreaching form of expressive behavior.

Guilt, remorse, and anger have been successfully attacked by experiment in the German laboratories. Self-consciousness is certainly important and intriguing enough to merit a similar study. The author is to be thanked for calling attention to its experimental possibilities, and for providing an initial treatment of a neglected problem.

GORDON W. ALLPORT.

Harvard University.

KRAUT, MAURICE H. *Major Aspects of Personality*. Chicago: The College Press, 1933. Pp. xviii+364.

This book presents an omnibus view of personality, the major aspects of which are provided by "the ecological, biological, cultural, pre-natal, natal, early post-natal, later post-natal, and the situational

(laboratory and clinical) approaches to the study of the individual." The author modestly attempts to summarize the contributions of such men as Darwin, Pavlov, Freud, and the members of the 'Chicago School' into one harmonious treatment of personality. The consummation of this task will probably not be accepted readily by most psychologists.

Since "with the exception of one or two types of tests that proceed along desirable lines, the entire personality-testing program is without hope of recovery from its present state of affairs," the author proposes to study personality by interpreting the symbolic gestures through which individuals reveal their subconscious activities. Personality-types, therefore, depend upon the un verbalized patterns of behavior 'conditioned' in the developing individual. The manner in which the author handles this concept is illustrated by the following reference to painting, a profession likely to be chosen by individuals of the 'anal-genital-fantasy' type.

"In painting, the smudging of solids and pouring of liquids is easily related to the anal-evacuative functions. The genital aspect is found in the symbolization of the phallus by the brush, and the symbolic representation of inhibitions connected with the castration difficulty. The fantasy element inheres in the reclusive form which painting takes. It is not a mobile occupation. It is one of dreaming and 'imaging' instead."

The author makes a laudable attempt to explain the 'subconscious' on a physiological basis, but unfortunately his theory would require a specialization of musculature for which the anatomists and physiologists have as yet offered no evidence. The book is amply documented, interestingly written and well bound, though it contains numerous typographical errors.

ARTHUR JENNESS.

University of Nebraska.

CLARK, L. PIERCE. *Lincoln, A Psycho-Biography*. New York: Charles Scribner's Sons, 1933. Pp. xiv+570.

The author has selected and assembled a great many interesting facts about Lincoln and has presented them systematically and sympathetically. In spite of his eminent qualifications to apply the psychoanalytic technique to his ample record of this historic personality, he is much less convincing as an analyst than as a biographer of Lincoln. Except in the early chapters on the youth of Lincoln, and three later ones on his melancholic temperament, his sense of humor, and his recurrent dreams and death wishes, the study is far more

of a biography than a psycho-biography. Set into the text of the early chapters are psychoanalytic commentaries on events significant in the unconscious life of Lincoln, events of very early life which compose the ambivalence of ego and super-ego in the life of the great democrat. The greatest psychic injury was the early death of his mother, leaving him with a strong infantile memory-image which became the core of the great tenderness of his adult years; this early thwarting of the mother-child relationship and consequent fixation at a narcissistic level was at the root also of his difficulties in his relations with women and in his married life. Significant also the unimaginative father who demanded literal obedience of the mild boy and contributed unwittingly to that neurotic, almost compulsive honesty, as well as to his too great respect for judges and political bosses (father-surrogates) early in his legal career. Perhaps the most important contribution from the psychoanalytic portions of the book is the author's judgment that Lincoln suffered from neurotic depression, a diagnosis which seems to fit the Lincoln whom we know in anecdote, history, sculpture, portraiture and drama—the deeply-sad Lincoln of the Gettysburg speech. A later chapter on the death wishes also contributes to this picture.

Although as a scientist the author sincerely wishes to “understand better the emotional forces which contribute to greatness,” he admires his subject too deeply and personally to hold himself coldly to his task. The artist in him wins. Events become too powerful and Lincoln too great quite to fit into the analytical categories. After all at this stage of the development of psychoanalytical theory the little people are perhaps more instructive clinical specimens than are demi-gods and geniuses.

ADA L. ALLPORT.

Cambridge, Massachusetts.

YATES, DOROTHY H. *Psychological Racketeers*. Boston: Gorham Press, 1932. Pp. 232.

The title of this book expresses Dr. Yates' carefully weighed opinion respecting “applied psychologists,” who are the itinerant inspirers of the sick, the gullible, and the discouraged. Inordinate powers of suggestion, smug self-confidence and an orotund voice seem to be the chief assets of the more affluent of these “racketeers.”

The author investigates fourteen “applied psychologists.” She discovers most of their claims concerning their qualifications and

credentials to be extravagant, misleading, and absurd. High-powered emotional appeals are made in free introductory lectures advertising the pay classes which explain "how to get what you want," whether it is "success, health, or happiness." The author examines as well six published "systems" which she finds almost equally thin and without benefit of psychology as taught in our universities.

It seems regrettable that Dr. Yates does not study more completely the abnormal (paranoid?) trends of her racketeers. A chapter dealing with the mental aberrations of these mighty dogmatists of the "Secret Laws of Success" would have been enlightening.

The book is written in a readable and entertaining style which is sometimes more flippant than convincing. However, since the author intends primarily to expose to the lay reader the frauds of "applied psychologists" her purpose is admirably served.

IRVING E. BENDER.

Dartmouth College.

WARD, HARRY F. *In Place of Profit*. New York and London: Charles Scribner's Sons, 1933. Pp. xi+460.

This book ought to be useful to the psychologist whose expert opinion is so frequently requested as an aid in answering this trite question: "But Communism is contrary to human nature, isn't it?" Instead of making vague references to the plasticity of the nervous system, the student of human nature may now say:

"Read *In Place of Profit*. Therein you will see how the Soviet Government is able to make people work and to support the state enthusiastically. The source of motivation is not completely different from the one which is used to make our system go: people still compete with one another and with other groups for increased wages and for social honors. And yet the competition is regulated, so that no one class of individuals can raise itself high by crushing others. Other incentives have been either created or emphasized in this new society: work is considered a privilege, not a hardship; workers are proud of their products, for most of them do feel that they are producing for themselves and that they are self-governing; the hostile world which surrounds Russia makes her workers more anxious to develop their country; greater opportunities are being offered to everybody. Professor Ward, in rather dull fashion, it is true, quotes Soviet authorities, because he wants you to see that 'human nature' is being 'changed' in accordance with a unifying principle and a well

developed plan. In short, after reading this book, you will be inclined to believe that people in Russia are motivated by a new system of social values."

Harvard University.

LEONARD W. DOOB.

MYERSON, ABRAHAM. *Social Psychology*. New York: Prentice-Hall, 1934. Pp. xv+640.

A neurologist and psychiatrist, Dr. Myerson, venturing into the field of social psychology, seeks to develop his argument from two main theses: "The first is that the visceral-organic structure of man is basic to the understanding of psychology," and the second, "that apart from his group a man is a mere potentiality." The author does not claim originality for the facts, but rather for his emphasis and formulation of principles.

The treatment is divided into four parts: "General Social Psychology," "Visceral Social Psychology," "Social Psychology of the Family," and "Misdoing." After a preliminary survey of the field of social psychology, wherein the difficulties of a scientific social psychology are pointed out, environmental forces are discussed in detail. With the exception of the chapter on the "Social Psychology of the Nervous System" which serves as a misplaced introduction to Part II, the remaining chapters of Part I are concerned with such varied topics as "Gregariousness, Animal and Human"; "General Aspects of Maturation, Instinct, Emotion, and Mood"; "Certain Basic Activities and Their Social Psychology"; the "Social Psychology of Intelligence"; "Social Learning and the Teaching Process"; "Group Interaction"; "Social and Individual Struggle"; and "Communication and Language." The basic thesis that man is to be comprehended only in the light of both his "external" and "internal" environments, is not rigidly developed in the discussion of these subjects.

Part II, which deals with "Social Psychology and the Gastro-Intestinal Tract," the "Social Psychology of the Sexual Functions," as well as with the social psychology of other minor visceral functions, is an elaboration of the view that "the cortex is the organ of social experience and social learning, and through it the social environment is able not only to control the so-called voluntary activities, but to establish a control over the visceral activities" (p. 175). This suggestive section is a further extension of E. J. Kempf's thesis as set forth in his "Autonomic Functions and Personality." However, when the author states that "since these visceral responses become

socially evaluated as to propriety, morality, and fitness . . . they become of immense importance in social relations," and again that, "they involve the approval and the disapproval of the group" he is no longer adhering to the 'Kempian formula.' Had the author contented himself with developing this 'formula' in greater detail, the result would have been a happier one.

Dr. Myerson has stepped beyond the limits of his special field and the book becomes an admixture of sociology, social psychology, general psychology, biology, physiology, and anthropology. This is inevitable considering his methodological principles. As a psychiatrist and a physician, he has "little patience with any departmental or philosophic delimitations of mind." He rejects a social psychology that is experimental and is emphatic as to the inadequacy of laboratory experiments and correlational procedures; nor does he "accept any rigid delimitation of the field of social psychology. It is legitimate at the present time and the present development of the subject to follow the go-as-you-please system." The logical consequence of such a position is a clinical approach, although the author apparently does not fully realize this. It is the view natural to the practitioner but will be rejected by the experimentally-minded social psychologist for at least two reasons: any science of necessity must be limited in its scope, on the sufficiently cogent grounds of expediency, and secondly, the book which is the product of so eclectic an approach, often fails to come to grips with its problems, and as a result seems unsystematic.

Harvard University.

L. M. HURVICH.

BRIDGES, J. W. *Personality, Many in One*. Boston: Stratford, 1932. Pp. 215.

This book is subtitled "An Essay in Individual Psychology" and it must indeed be regarded as an essay and not as a systematic treatise on personality. Each chapter is entirely descriptive and little attempt is made to account for the structures or manifestations of personality. Variegated motivational schemes are used throughout, the concepts of "drive," "trait," and "attitude" being employed indiscriminately. Intellect, temperament, and character are considered as "phases" of personality but their interrelations are not clearly analyzed. The most useful portions of the book are the descriptions of the typologies of Kretschmer, Berman, James, Jung, Spranger and of the various abnormal and pathological types.

Harvard University.

HADLEY CANTRIL.

ELLWOOD, CHARLES A. *Methods in Sociology. A Critical Study.* With an introduction by Howard E. Jensen. North Carolina: Duke University Press, 1933. Pp. xxxiv+214.

This vigorous and effective discussion has two closely related purposes: (1) to criticize the recent tendency to limit sociology to the method of the physical sciences, namely, the measurement of objective facts—a limitation which, according to the author, is entirely unnecessary and which would cripple the development of the science; and (2) to indicate the relation of sociology to the other sciences, ethics and education included.

The author takes the program of the Russian physiologist, Zeliony, as a perfect example of the radical behaviorism he opposes. According to that view, nothing can be an object of science which is not observable by the senses. Therefore, in so far as a scientific sociology is concerned, man should be regarded as a mere biological organism and every reference to mind and consciousness should be eliminated. Sociology is to be limited to the observation and measurement of the external, and to explanations in physiological terms (mainly in terms of the conditioned reflex). It is quite clear, even to Zeliony, that in our present imperfect knowledge of physiology, his sociology, or as Bechtereff called it, "collective reflexology" can have very little value for society; it cannot solve the problems confronting us.

Ellwood is, however, very far from advocating the rejection of the objective method. He knows and appreciates its great value, and he would make as full use of it as possible. But he insists upon its inadequacy and the necessity of using also other methods specifically adapted to the non-physical, non-physiological nature of what is, as a matter of fact, the essential subject-matter of sociology.

In Chapter IV three reasons are urged for the inadequacy of behavioristic descriptions of human social behavior. They do not show the true nature of the human social process, which is essentially a process of intercommunication; they do not show the true nature of adult human behavior, which is essentially cultural; they fail to show the true nature of human institutions, which are essentially based upon values and valuing processes.

Human social behavior and institutions are products of culture. And culture arises through invention, which is creative mental synthesis; and through learning, which involves "intercommunication or the exchange of conscious experiences, especially through articulate speech." "The social life of man is a life which involves

the appreciation of values and value-responses in practically all of its phases." "Every institution involves values which a community has reflected upon and approved." How, then, could the methods of behaviorism, which disregards the true nature of human behavior and of social institutions, serve adequately the student of sociology?

The two great methods of sociology are psychological analysis and historical interpretation. As to the newer methods—statistics, social survey, and case study—"they are special methods of research that have been developed within the larger methods named." Special chapters (VI and VII) are devoted to a discussion of the survey and the statistical methods.

The second half of the book is concerned with the relations of sociology to history, economics and cultural anthropology, to the social basis of ethics, of law, of government, of social work, and of the science of education. The final chapter on the educational theory of social progress and the preceding one on the science of education seem to us particularly timely and valuable. The author regards the two chief problems of education—its aim and its curriculum—as "essentially problems in an applied sociology." "Education should regard itself as a sort of self-conscious process of social evolution, concerned with the general advancement of humanity rather than with the fitting of individuals for a successful career." Education is the condition of social progress within our control: "Civilization itself is the production, transmission and diffusion of the knowledge, ideas, and values by which men have learned to regulate their conduct."

The psychologist will find that much of Ellwood's argument against pure behaviorism in sociology is applicable also to pure behaviorism in psychology. He will, moreover, be thankful for this excellent means of orienting himself in the vast field of the social sciences.

"Methods in Sociology" will, it seems to me, force the conviction that the disagreement between the pure behaviorists and the sociologists represented by Ellwood is in part a verbal one: how shall the term "science" be used? If it be intended to designate only bodies of knowledge established by means of exact measurement, then much of the products of the methods urged in this book would not be "science." But that conclusion would not settle the question of the knowledge-value of the various methods which can be used for the study of social life, for it may not be denied that much valuable knowledge is secured without the intervention of measurements.

One of the impressive instances of this is the epoch making work of Darwin; exact measurements had extremely little to do with it.

The disagreement in sociology is not only as to the meaning of the term "science," but also as to the value of the knowledge secured by the several available methods. I have just said that all value may not be denied to the non-behavioristic methods. But there are wide divergencies in the estimation of their value. The most effective way to bring agreement on this point is not so much abstract discussions regarding the nature of the methods and of the subject matter to which they are to be applied, as the actual use of them for all they are worth. The law of the survival of the fit or of the fittest will operate here also. What Ellwood is urging in this excellent book is precisely the use of all available methods for securing sociological knowledge. He makes clear, moreover, that a sociology *à la* Zelig might deserve the name "science," but that it would not be a science of the social life of Man.

Mention should be made of the substantial preface by Professor H. E. Jensen. It constitutes a valuable addition to the book.

JAMES H. LEUBA.

BOOKS RECEIVED

Studies in the Psychology of Art under the direction of Norman C. Meier. University of Iowa Studies in Psychology, No. XVIII. Psycho. Monog., Vol. XLV, No. 200, 1933. Pp. viii+188.

ZUCKERMAN, S., *Functional Affinities of Man, Monkeys, and Apes*. New York: Harcourt, Brace and Company, 1933. Pp. xviii+203.

SCHWESINGER, GLADYS C., *Heredity and Environment*. New York: The Macmillan Company, 1933. Pp. xviii+484.

ELLWOOD, CHARLES A., *Methods in Sociology*. Introduction by Howard E. Jensen. North Carolina: Duke University Press, 1933. Pp. xxxiv+214.

FREUD, SIGMUND, *New Introductory Lectures on Psycho-Analysis*. Translated by W. J. H. Sprott. New York: W. W. Norton & Company, Inc., 1933. Pp. 257.

BLUMER, HERBERT, *Movies and Conduct*. New York: The Macmillan Company, 1933. Pp. xiv+257.

BLUMER, HERBERT, and HAUSER, PHILIP M., *Movies, Delinquency, and Crime*. New York: The Macmillan Company, 1933. Pp. xiii+233.

PETERSON, RUTH C., THURSTONE, L. L., *Motion Pictures and the Social Attitudes of Children*. New York: The Macmillan Company, 1933. Pp. xvii+142.

RADECKI, W., *Tratado de Psicología*. Buenos Aires: Jacobo Peuser, Ltda., 1933. Pp. 428.

KELLY, WILLIAM A., *Educational Psychology*. New York: The Bruce Publishing Co., 1933. Pp. xix+501.

PORTEUS, S. D., *The Maze Test and Mental Differences*. New Jersey: Smith Printing and Publishing House, 1933. Pp. ix+212.

CHANDLER, ALBERT R., *A Bibliography of Experimental Aesthetics 1865-1932*. Ohio: Ohio State University, 1933. Pp. 25.

HELD, OMAR C., *An Attempt to Predict the Success of University Freshmen in Their Adjustment to Scholastic Work*. Michigan: Edwards Brothers, Inc., 1933. Pp. vii+45.

BRUHLMANN, OTTO, *Zweierlei Wissen. Zur Lebenskrise Durch Die Entfesselung des Verstandes*. München: Ernest Reinhardt, 1934. Pp. 51.

DEFFENBAUGH, W. S., and ZEIGEL, W. H., JR., *Selection and Appointment of Teachers*. Washington: U. S. Department of the Interior, 1933. Monograph No. 12. Pp. vii+115.

BILLETT, R. O., *Provisions for Individual Differences Marking, and Promotion*. Washington: U. S. Department of the Interior, 1933. Monograph No. 13. Pp. xi+472.

SPAULDING, F. T., FREDERICK, O. I., and KOOS, L. V., *The Reorganization of Secondary Education*. Washington: U. S. Department of the Interior, 1933. Monograph No. 5. Pp. xii+423.

REAVIS, W. C., *Programs of Guidance*. Washington: U. S. Department of the Interior, 1933. Monograph No. 14. Pp. vi+144.

KAWIN, ETHEL, *Children of Preschool Age*. Chicago: University of Chicago Press, 1934. Pp. xxv+340.

BAYLEY, NANCY, *The California First-Year Mental Scale*. Calif.: University of California, 1933. Syllabus Series, No. 243. Pp. 24.

CONRAD, HERBERT S., *The California Behavior Inventory for Nursery School Children*. Calif.: University of California, 1933. Syllabus Series, No. 244. Pp. 74.

BARDEN, H. P., *Trekk av Synsofsatningen og dens Utvikling*. Oslo: I Kommisjon Hos Jacob Dybwad, 1933. Pp. 56.

NOTES AND NEWS

ACCORDING to *Science*, Dr. Wolfgang Koehler, professor of philosophy and director of the Psychological Institute at the University of Berlin, has been appointed William James lecturer in philosophy and psychology at Harvard University.

The Social Science Research Council announces the award of the following Grants-in-Aid of Research in Psychology:

Thomas Garth, Professor of Psychology, University of Denver, to aid in the completion of a study of the intelligence of foster Indian children in white homes.

Eugenia Hanfmann, research worker, Worcester State Hospital, to aid in the completion of a study of the psychological situation of the patients in hospitals for mental diseases.

Harold E. Jones, Professor of Psychology, University of California, to aid in the completion of a study of child development as related to certain social and economic factors.

Johnson O'Connor, Associate Professor of Psychology, Stevens Institute, to aid in the construction of a dictionary of responses.

Keith Sward, Professor of Psychology, Pennsylvania College for Women, to aid in the completion of a study of Jewish psychology.

Kimball Young, Professor of Psychology, University of Wisconsin, to aid in the completion of a study of Mormon family life with particular reference to polygyny.

The Council also announces the award of a Fellowship to Morris S. Viteles, Assistant Professor of Psychology, University of Pennsylvania, for study in Russia of the methods employed by Russian psychologists in promoting individual efficiency and adjustment in industry.

DR. EDNA F. HEIDBREder has been appointed Professor of Psychology at Wellesley College, beginning with the academic year 1934-1935, succeeding to the position left vacant by the death of Professor Eleanor A. McC. Gamble.

SECTION I (Psychology) of the A.A.A.S. is meeting jointly with the Western Psychological Association during the Pacific Coast meetings of the A.A.A.S. The joint meetings are to be held on June 22 and 23 in Berkeley. Members of Section I and other psychologists are invited to attend. Correspondence concerning the meeting may be addressed to Dr. R. C. Tryon, Secretary of the Western Psychological Association, University of California, or to Dr. John A. McGeoch, University of Missouri, Secretary of Section I.

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